Borough of Rumson
BOROUGH HALL
80 East River Road
Rumson, New Jersey 07760-1689
rumsonnj.gov

RECEIVED
JAN 20 2026
ZONING OFFICE

APPLICATION TO THE ZONING BOARD OF ADJUSTMENT

SEBASTIAN CINA | AUTOPROCOLL@AOL.COM | 1-917-699-4603
Name of Applicant | Email | Phone Number

19 HARBOR DRIVE, RUMSON, NJ 07719 | 111 | 22 & 22.01
Property Address | Block | Lot

N/A
Name of Owner (IF NOT APPLICANT)
A corporation, S-Corp, LLC or LLP MUST be represented by a licensed attorney in the State of New Jersey.

RICK BROOSKY, ESQ. 732-922-1000 RBROOSKY@ANSELL.LAW
Applicant's Attorney and contact information (if any)

DAVID J. DARCY, RA 201-826-4712 DARCYRA55@GMAIL.COM
Applicant's Architect and contact information (if any)

A.J. GARITO, JR. PE 732-866-0111 AJGC TWORIVERENG.COM
Applicant's Engineer and contact information (if any)

X _____ 1-9-26
Signature of Applicant or Agent | Date

Proposed plan NEW 120 SF WINE ROOM ADDITION WITH BALCONY ABOVE; CONSTRUCT A REAR 1,234 SF COVERED PORCH WITH OUTDOOR KITCHEN AND RESTROOM; CONSTRUCT NEW 1,399 SF POOL & SPA; NEW 1,227 SF POOL PATIO; NEW 473 SF GUEST SUITE PATIO; AND REQUEST TO KEEP A NONCONFORMING CABANA THAT WAS TO BE REMOVED.

Hardship Encountered

PROPERTY HAS WATER ON THREE SIDES AND IS UNUSUAL IN SHAPE.

Variances Requested

LISTED ON THE FOLLOWING PAGE.

VARIANCES REQUESTED

- Schedule 5-3 Floor Area Ratio 0.15 whereas .014 is permitted (D-variance required);
- Schedule 5-3 Permitted Maximum Floor Area of 9,250 square feet, whereas 8,626 square feet is permitted (intensified, 7% over);
- Schedule 5-4 Maximum Permitted Building Coverage of 7,659 square feet, whereas 5,273 square feet is permitted (intensified, 45% over);
- Schedule 5-4 Maximum Permitted Lot Coverage of 18,862 square feet, whereas 13,788 square feet is permitted (intensified, 37% over);
- 22-7.32 Lots Bordering on a River require 50' setback from waterways
    - Proposed Pergola on masonry patio at 41.9' (new);
    - Existing cabana at 19' (new);
- 22-7.8g Accessory Pool requires 25' setback – existing pool at 19'.

Borough of Rumson
BOROUGH HALL
80 East River Road
Rumson, New Jersey 07760-1689
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Marie DeSoucey
Land Use & Development Official

office 732.842.3300, ext. 107
fax 732.219.0714

mdesoucey@rumsonnj.gov

Denial Memorandum

Date: December 11, 2025

Applicant: Sebastian Cina
Address: 16 Harbor Dr, Rumson, NJ 07760
Block 111, Lot 22& 22.01, Zone: R-2

RE: Land Use & Development Permit Application Denial

Description of work: New 120 SF wine room addition with balcony above; construct a rear 1,234 SF covered porch with outdoor kitchen and restroom; construct new 1,399 SF pool & spa; new 1,227 SF pool patio; new 473 SF guest suite patio; and request to keep a nonconforming cabana that was to be removed as part of previous permit.

Property description: Oversized, irregular shaped property with water on three sides. The required yards have been designated by the applicant as such: primary frontage is at the cul-de-sac; secondary frontage at the lagoon side (front porch credit taken); side yard adjacent to Lot 21; secondary side adjacent to Lot 23; rear yard along the Shrewsbury River. While the existing principal building conforms to these setbacks, the maximum permitted floor area and building coverage is exceeded. The existing inground pool and spa (proposed koi pond) does not conform to the ordinance's 25-foot setback. The existing cabana was to be removed as part of a 2024 Zoning Permit which permitted expansion of front great room.

The application was **denied** for the following non-conformities:

Borough of Rumson Ordinances/Development Regulations

- Schedule 5-3 Floor Area Ratio 0.15 whereas .014 is permitted (D-variance required);
- Schedule 5-3 Permitted Maximum Floor Area of 9,250 square feet, whereas 8,626 square feet is permitted (intensified, 7% over);
- Schedule 5-4 Maximum Permitted Building Coverage of 7,659 square feet, whereas 5,273 square feet is permitted (intensified, 45% over);
- Schedule 5-4 Maximum Permitted Lot Coverage of 18,862 square feet, whereas 13,788 square feet is permitted (intensified, 37% over);
- 22-7.32 Lots Bordering on a River require 50' setback from waterways
  - Proposed Pergola on masonry patio at 41.9' (new);
  - Existing cabana at 19' (new);
- 22-7.8g Accessory Pool requires 25' setback – existing pool at 19'.

Supporting documents to the application include:

- Plot Plan, prepared, signed and sealed by A.J. Garito, Jr. PE, dated August 11, 2025, last revision (2) December 9, 2025, consisting of six (6) sheets (#'s 1-5, 2A).
- Architectural Plot Plan, Zoning Information & General Notes prepared, signed and sealed by David J. Darcy, RA, dated June 15, 2023, last revision (19) November 6, 2025, consisting of three (3) plan sheets (A-001.02, SK-001.00, SK-002.00) and two (2) sheets of photos (Photo-1.0, Photo 2.0).

If you have any questions or require additional information, please do not hesitate to contact me.

Marie DeSoucey
Land Use & Development Official

Cc: Thomas Rogers, Borough Clerk/Administrator
David M. Marks, P.E., C.M.E., Borough Engineer
Sabine O'Connor, Technical Assistant

BOROUGH OF RUMSON, MONMOUTH COUNTY, NEW JERSEY
SCHEDULE OF ZONING DISTRICT REGULATIONS
ZONE DISTRICT: R-2 SINGLE FAMILY

REGULATION:	REQUIREMENT:	EXISTING:	COMPLY:
INTERIOR LOTS:			
MIN. LOT AREA	1.0 ACRE/43,560 S.F.	1.48 ACRES/64,465.186 S.F.	YES
MIN. LOT WIDTH AND FRONTAGE	150 FEET	150 FEET	YES
MIN. YARD REQUIREMENTS:			
(PRINCIPAL)			
FRONT	75 FEET	76.2 FEET	YES
ONE SIDE	25 FEET	53.5 FEET	YES
TOTAL OF TWO SIDES	50 FEET	N/A	N/A
REAR	40 FEET	55.8 FEET	YES
(ACCESSORY BUILDING)			
SIDE	15 FEET	N/A	N/A
REAR	15 FEET	19.3 FEET	YES
INTERIOR LOT SHAPE	100 FEET DIAMETER	>100 FEET	YES
MAX. BUILDING HEIGHT			
(PRINCIPAL)			
STORIES	2 ½ STORIES	2 ½ STORIES	YES
HEIGHT RIDGE	40 FEET	39.3 FEET	YES
HEIGHT EAVES	32 FEET	–	–
(ACCESSORY)			
STORIES	1 ½ STORIES	1 STORY	YES
HEIGHT	24 FEET	15.0 FEET	YES
MAX. LOT AND BUILDING COVERAGE: (LOTS 10,000-70,000 S.F.)			
LOT COVERAGE 3,970 S.F. + 0.1915 X SF OVER 10,000 S.F.	13,786 S.F.	13,639.2 S.F.	YES
BUILDING COVERAGE 2,095 S.F. + 0.0620 X SF OVER 10,000 S.F.	5,273 S.F.	5,731.3 S.F.	NO

ZONING CHART SUBJECT TO REVIEW AND APPROVAL BY THE BOROUGH ZONING OFFICER.

(CABANA ROOF PEAK ELEVATION=23.6')

SCHEDULE OF COVERAGE:

HOUSE	4,915.5 S.F.
COVERED PORCH (LF)	28.6 S.F. (2)
STEPS	12.0 S.F.
COVERED PORCH (CF)	224.0 S.F. (2)
STEPS	13.5 S.F.
COVERED PORCH (RF)	45 S.F. (2)
STEPS	8 S.F.
SCREENED PORCH	141.2 S.F.
COVERED DECK (LR)	172.5 S.F.
STEPS	62.1 S.F.
WOOD DECK	442.5 S.F. (1)
COVERED DECK (RR)	125.0 S.F.
STEPS	45.0 S.F.
COVERED PORCH (RR)	89.6 S.F.
STEPS	45.0 S.F.
CABANA	287.5 S.F.
POOL/HOT TUB	837.1 S.F.
BLUESTONE PATIO	775.2 S.F. (1)
GRAVEL DRIVE	5,403.6 S.F.
BRICK PAVER APRON	232.5 S.F.
BRICK PAVER WALK	88.0 S.F. (1)
BRICK PAVER DROP OFF	442.5 S.F.
SLATE WALK	325.0 S.F. (1)
CONCRETE WALK/APRONS	156 S.F.
WOOD WALK	1,350.0 S.F. (1)
STONE PILLARS	15 S.F.
STONE WALLS	338 S.F.
TOTAL	16,619.9 S.F.

(1) EXCLUDED IN LOT COVERAGE CALCULATION.
(2) EXCLUDED IN BUILDING COVERAGE CALCULATION.

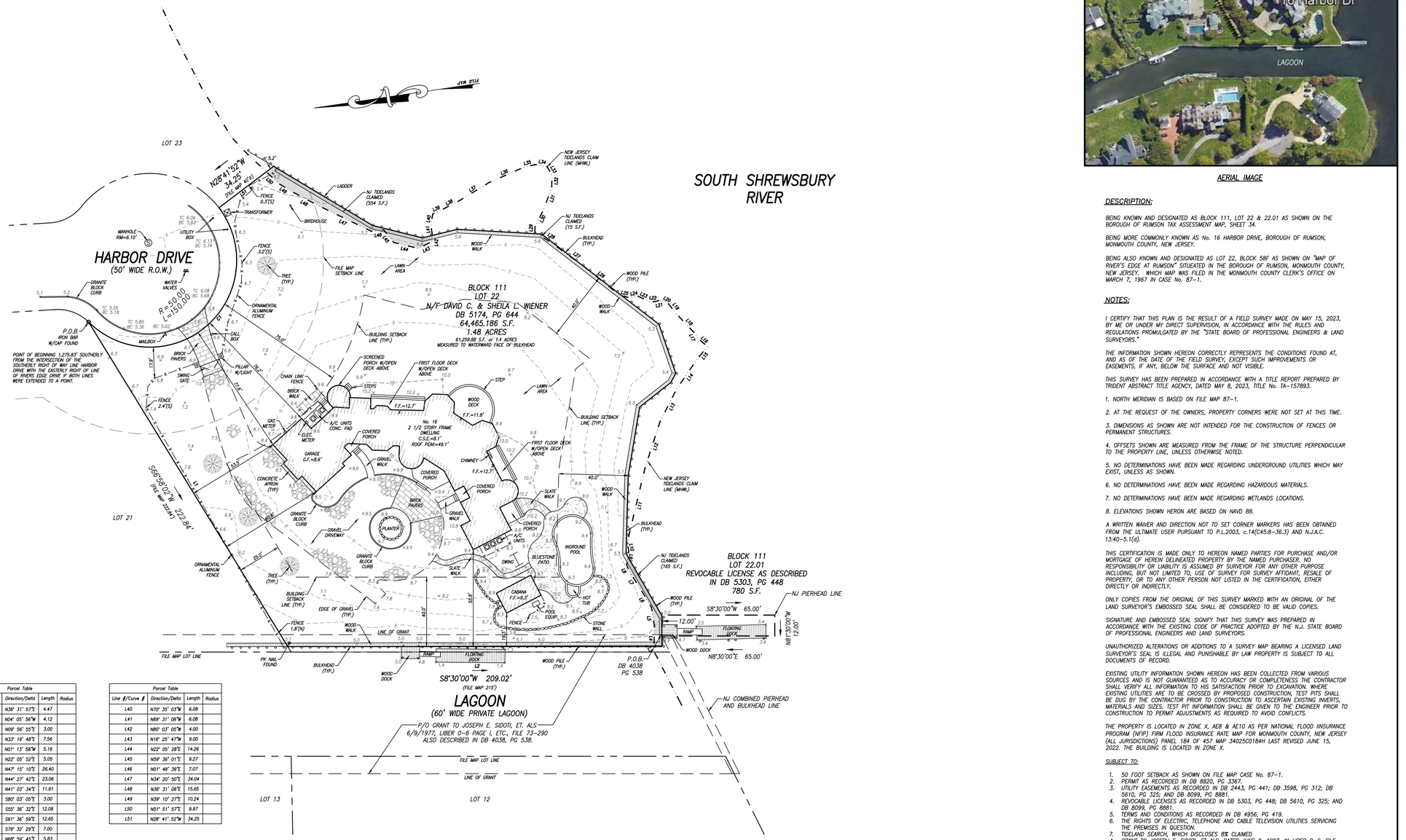
BUILDING HEIGHT:

(PRINCIPAL)

AVERAGE GRADE AROUND BUILDING = 9.8'
ROOF PEAK = 49.1'
BUILDING HEIGHT = 39.3'

(ACCESSORY)

AVERAGE GRADE AROUND BUILDING = 8.6'
ROOF PEAK = 23.6'
BUILDING HEIGHT = 15.0'



Parcel Table			
Line #/Curve #	Direction/Delta	Length	Radius
C1	171.8873	150.00	50.000
L1	S66° 58' 02"W	222.84	
L2	S08° 30' 00"W	209.02	
L3	N71° 17' 46"E	0.72	
L4	S79° 46' 59"E	14.00	
L5	N89° 38' 16"E	11.18	
L6	N67° 28' 28"E	13.04	
L7	N66° 32' 38"E	10.78	
L8	N73° 43' 04"E	4.53	
L9	S72° 52' 07"E	8.00	
L10	N88° 37' 53"E	5.10	
L11	S68° 04' 17"E	43.96	
L12	S63° 32' 39"E	28.16	
L13	S54° 33' 10"E	21.05	
L14	S47° 02' 44"E	20.19	
L15	S42° 54' 03"E	10.04	
L16	N49° 45' 04"E	7.81	
L17	N73° 20' 45"E	2.23	
L18	N55° 05' 49"E	17.02	
L19	N61° 17' 36"E	6.40	

Parcel Table			
Line #/Curve #	Direction/Delta	Length	Radius
L20	N36° 31' 57"E	4.47	
L21	N04° 05' 56"W	4.12	
L22	N09° 56' 55"E	3.00	
L23	N33° 19' 48"E	7.56	
L24	N01° 13' 58"W	5.16	
L25	N22° 05' 52"E	5.05	
L26	N47° 15' 10"E	26.40	
L27	N44° 27' 42"E	23.06	
L28	N41° 03' 34"E	11.61	
L29	S80° 03' 05"E	3.00	
L30	S55° 36' 32"E	12.08	
L31	S61° 36' 59"E	12.65	
L32	S79° 32' 29"E	7.00	
L33	N68° 59' 45"E	5.83	
L34	N18° 04' 57"E	7.07	
L35	N06° 00' 40"W	7.28	
L36	N15° 14' 21"W	21.00	
L37	N22° 51' 57"W	20.30	
L38	N18° 47' 42"W	10.27	
L39	N16° 36' 59"W	6.71	

Parcel Table			
Line #/Curve #	Direction/Delta	Length	Radius
L40	N70° 35' 03"W	6.08	
L41	N89° 31' 08"W	6.08	
L42	N80° 03' 05"W	4.00	
L43	N16° 25' 47"W	9.00	
L44	N22° 05' 28"E	14.26	
L45	N59° 36' 01"E	9.27	
L46	N01° 48' 39"E	7.07	
L47	N34° 20' 50"E	34.04	
L48	N36° 31' 06"E	15.65	
L49	N39° 10' 27"E	10.24	
L50	N51° 51' 57"E	9.97	
L51	N28° 41' 52"W	34.25	

LEGEND

STREET SIGN	IRON BAR FOUND
CLEANOUT	MAILBOX
SANITARY MANHOLE	STREET TREE
DRAINAGE MANHOLE	X 0.00 EXIST. SPOT ELEVATION
CATCH BASIN	10 EXISTING CONTOUR LINE
CATCH BASIN	GAS GAS LINE
SOIL BORING	WATER WATER LINE
GUY WIRE	GAS VALVE
UTILITY POLE	WATER VALVE
P.K. NAIL FOUND	FIRE HYDRANT
CONC. MONUMENT FOUND	LIGHT POST

AERIAL IMAGE

DESCRIPTION:

BEING KNOWN AND DESIGNATED AS BLOCK 111, LOT 22 & 22.01 AS SHOWN ON THE BOROUGH OF RUMSON TAX ASSESSMENT MAP, SHEET 34.

BEING MORE COMMONLY KNOWN AS No. 16 HARBOR DRIVE, BOROUGH OF RUMSON, MONMOUTH COUNTY, NEW JERSEY.

BEING ALSO KNOWN AND DESIGNATED AS LOT 22, BLOCK 58F AS SHOWN ON "MAP OF RIVER'S EDGE AT RUMSON" SITUEATED IN THE BOROUGH OF RUMSON, MONMOUTH COUNTY, NEW JERSEY. WHICH MAP WAS FILED IN THE MONMOUTH COUNTY CLERK'S OFFICE ON MARCH 7, 1967 IN CASE No. 87-1.

NOTES:

I CERTIFY THAT THIS PLAN IS THE RESULT OF A FIELD SURVEY MADE ON MAY 15, 2023, BY ME OR UNDER MY DIRECT SUPERVISION, IN ACCORDANCE WITH THE RULES AND REGULATIONS PROMULGATED BY THE "STATE BOARD OF PROFESSIONAL ENGINEERS & LAND SURVEYORS."

THE INFORMATION SHOWN HEREON CORRECTLY REPRESENTS THE CONDITIONS FOUND AT, AND AS OF THE DATE OF THE FIELD SURVEY, EXCEPT SUCH IMPROVEMENTS OR EASEMENTS, IF ANY, BELOW THE SURFACE AND NOT VISIBLE.

THIS SURVEY HAS BEEN PREPARED IN ACCORDANCE WITH A TITLE REPORT PREPARED BY TRIDENT ABSTRACT TITLE AGENCY, DATED MAY 8, 2023, TITLE No. TA-157893.

1. NORTH MERIDIAN IS BASED ON FILE MAP 87-1.

2. AT THE REQUEST OF THE OWNERS, PROPERTY CORNERS WERE NOT SET AT THIS TIME.

3. DIMENSIONS AS SHOWN ARE NOT INTENDED FOR THE CONSTRUCTION OF FENCES OR PERMANENT STRUCTURES.

4. OFFSETS SHOWN ARE MEASURED FROM THE FRAME OF THE STRUCTURE PERPENDICULAR TO THE PROPERTY LINE, UNLESS OTHERWISE NOTED.

5. NO DETERMINATIONS HAVE BEEN MADE REGARDING UNDERGROUND UTILITIES WHICH MAY EXIST, UNLESS AS SHOWN.

6. NO DETERMINATIONS HAVE BEEN MADE REGARDING HAZARDOUS MATERIALS.

7. NO DETERMINATIONS HAVE BEEN MADE REGARDING WETLANDS LOCATIONS.

8. ELEVATIONS SHOWN HERON ARE BASED ON NAVD 88.

A WRITTEN WAIVER AND DIRECTION NOT TO SET CORNER MARKERS HAS BEEN OBTAINED FROM THE ULTIMATE USER PURSUANT TO P.L.2003, c.14(C45:8-36.3) AND N.J.A.C. 13:40-5.1(d).

THIS CERTIFICATION IS MADE ONLY TO HEREON NAMED PARTIES FOR PURCHASE AND/OR MORTGAGE OF HEREIN DELINEATED PROPERTY BY THE NAMED PURCHASER. NO RESPONSIBILITY OR LIABILITY IS ASSUMED BY SURVEYOR FOR ANY OTHER PURPOSE INCLUDING, BUT NOT LIMITED TO, USE OF SURVEY FOR SURVEY AFFIDAVIT, RESALE OF PROPERTY, OR TO ANY OTHER PERSON NOT LISTED IN THE CERTIFICATION, EITHER DIRECTLY OR INDIRECTLY.

ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID COPIES.

SIGNATURE AND EMBOSSED SEAL SIGNIFY THAT THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE ADOPTED BY THE N.J. STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS ILLEGAL AND PUNISHABLE BY LAW PROPERTY IS SUBJECT TO ALL DOCUMENTS OF RECORD.

EXISTING UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO EXCAVATION. WHERE EXISTING UTILITIES ARE TO BE CROSSED BY PROPOSED CONSTRUCTION, TEST PITS SHALL BE DUG BY THE CONTRACTOR PRIOR TO CONSTRUCTION TO ASCERTAIN EXISTING INVERTS, MATERIALS AND SIZES. TEST PIT INFORMATION SHALL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION TO PERMIT ADJUSTMENTS AS REQUIRED TO AVOID CONFLICTS.

THE PROPERTY IS LOCATED IN ZONE X, AE8 & AE10 AS PER NATIONAL FLOOD INSURANCE PROGRAM (NFIP) FIRM FLOOD INSURANCE RATE MAP FOR MONMOUTH COUNTY, NEW JERSEY (ALL JURISDICTIONS) PANEL 184 OF 457 MAP 34025C0184H LAST REVISED JUNE 15, 2022. THE BUILDING IS LOCATED IN ZONE X.

SUBJECT TO:

1. 50 FOOT SETBACK AS SHOWN ON FILE MAP CASE No. 87-1.
2. PERMIT AS RECORDED IN DB 8820, PG 3367.
3. UTILITY EASEMENTS AS RECORDED IN DB 2443, PG 441; DB 3598, PG 312; DB 5610, PG 325; AND DB 8099, PG 8881.
4. REVOCABLE LICENSES AS RECORDED IN DB 5303, PG 448; DB 5610, PG 325; AND DB 8099, PG 8881.
5. TERMS AND CONDITIONS AS RECORDED IN DB 4956, PG 419.
6. THE RIGHTS OF ELECTRIC, TELEPHONE AND CABLE TELEVISION UTILITIES SERVICING THE PREMISES IN QUESTION.
7. TIDELAND SEARCH, WHICH DISCLOSES 8% CLAIMED
   A. GRANT TO JOSEPH E. SIDOTI, ET ALS, DATED JUNE 9, 1997, IN LIBER O-6, FILE 73-290
   B. FILE 1342-09-0006.1, 10 YEAR LICENSE TD1140001.

NEW JERSEY TIDELANDS CLAIM LINE (MHWL) TAKEN FROM NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NJDEP), BUREAU OF TIDELANDS MANAGEMENT, TIDELANDS CLAIM LINE NEW JERSEY EDITION 20161214 (HYDR_WATER_TIDELANDS_CLAIM). PUBLISHED BY NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NJDEP) DIVISION OF INFORMATION TECHNOLOGY, MAP DATES 1971-1991.

CERTIFIED TO:

SEBASTIAN CINA & GIOVANNA CINA
BCD COMMUNITY BANK, ITS SUCCESSORS AND/ASSIGNS/ATIMA
TRIDENT ABSTRACT TITLE AGENCY, LLC
CLEARY, GIACONNE, ALFIERI & JACOBS, LLC
DANTE ALFIERI, ESQ

REVISION TABLE		
1	07-09-2023	ADDED NJ TIDELANDS CLAIM LINE

-NOTICE-
THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS AUTHORIZED FOR USE ONLY BY THE PARTY FOR WHOM THE WORK WAS CONTRACTED OR TO WHOM IT IS CERTIFIED.

BOUNDARY & TOPOGRAPHIC SURVEY
16 HARBOR DRIVE
BLOCK 111, LOT 22 & 22.01

BOROUGH OF RUMSON | MONMOUTH COUNTY | NEW JERSEY
DATE 05-31-2023 | SCALE 1" = 30' | JOB NO 23008

KF2T
Professional Land Surveyors
P.O. BOX 521
COLTS NECK TOWNSHIP, MONMOUTH COUNTY
NEW JERSEY 07722
TEL (908) 692-7853 FAX (609) 698-5350
KENNETH P. FRANK
PROFESSIONAL LAND SURVEYOR, N.J. LIC. No. 36727

GENERAL DATA

BLOCK	111
LOT	22 & 22.1
HOUSE #	16
TOWNSHIP	BOROUGH OF RUMSON
COUNTY	MONMOUTH

SCOPE OF WORK

PROPOSED ALTERATION / EXTENSION TO A DETACHED ONE FAMILY DWELLING.

PROPOSED EXTERIOR IMPROVEMENTS INCREASE IN BUILDING COVERAGE AND INCREASE IN IMPERVIOUS AREA, SUBJECT TO VARIANCE APPROVAL.

LEGEND

- < > PROPOSED GRADE
- ( ) EXISTING GRADE
- ② DENOTES DIRECTION OF PHOTOGRAPH
- STREET LINE
- ZONING LOT LINE
- REQUIRED YARD SETBACK
- PROPOSED DRIVEWAY, DECK AND WALKWAYS

ARCHITECTURAL DRAWING

A-001.00 - ARCHITECTURAL PLOT PLAN, ZONING INFORMATION & GENERAL NOTES

SITE PLAN NOTES

TOPOGRAPHIC SURVEY PREPARED BY KP2T PROFESSIONAL LAND SURVEYORS AND IS INCLUDED IN THE APPLICATION.

KP2T PROFESSIONAL LAND SURVEYORS TO PROVIDE TOPOGRAPHIC DESIGN & GRADING.

OWNER/BUILDER OF THE REFERENCED PROPERTY STATE THAT WORK DONE UNDER THIS APPLICATION WILL HAVE NO ADVERSE EFFECT ON ANY SURROUNDING PROPERTIES CONCERNING STORM WATER DRAINAGE MOREOVER, HE WILL BE RESPONSIBLE TO MAKE CERTAIN THAT WHILE THE WORK IS BEING DONE, THE SURROUNDING PROPERTIES WILL BE PROTECTED.

KOI POND CONSTRUCTION NOTE: REMOVAL OF CLORINE FILTRATION SYSTEM AND REPLACE WITH NATURAL FILTRATION SYSTEM, DEPTH OF KOI POND TO BE MAINTAINED AS A MINUMUM OF 4'-0", AND EQUIPED WITH UV LIGHT AND AERATION SYSTEM.

INGOUND POOL GENERAL SOIL GUIDELINES AND PREPARATION DETAILING TO BE PROVIDED BY POOL DESIGNER AND INSTALLER. NEW INFINITY EDGE POOL TO BEAR ON FIRM STABLE SOIL, AS INDICATED ON THE SOIL BORING LOG AND ANALYSIS FOR THIS SITE. EXCAVATION TO THIS DEPTH, IT IS ANTICIPATED, WILL REQUIRE DEWATERING AND STABILIZATION OF ADJACENT SOIL. THE BACKFILLING OF CLEAN SOIL AND A GRAVEL BASE FOR BEARING DISTRIBUTOIN OF THE POOL WILL REQUIRE LIFTS AS RECOMMENDED BY THE SOIL ENGINEER FOR PROPER COMPACTION.

CODE DATA

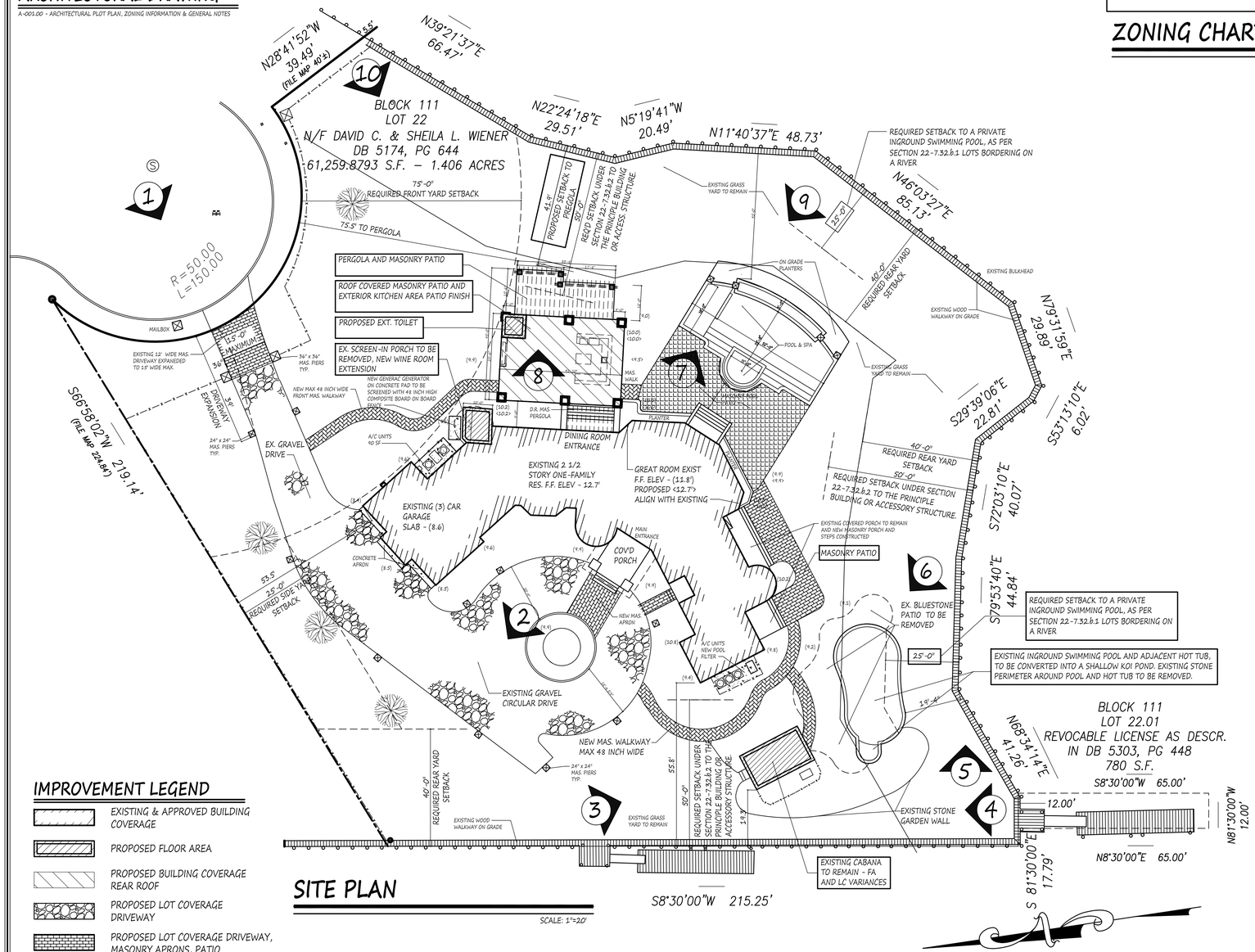
IDENTIFICAL OF PROJECT:
16 HARBOR DRIVE,
BOROUGH OF RUMSON, NJ

BUILDING / SITE CHARATERISTICS:
NUMBER OF STORIES – (2)
MAX LIVE LOAD – 40#
LOCATED WITHIN A FLOOD ZONE
NO CHANGE IN OCCUPANCY
CONSTRUCTION CLASS. – WOOD FRAME

APPLICABLE CONSTRUCTION CODES:
2021 INTERNATIONAL BUILDING CODE, NJ EDITION
2020 NATIONAL ELECTRIC CODE
2021 NATIONAL STANDARD PLUMBING CODE
2021 INTERNATIONAL MECHANICAL CODE
2021 INTERNATIONAL FUEL GAS CODE
2021 ENERGEY SUBCODE

ELEVATION CERTIFICATE INFORMATION
ELEVATION CERTIFICATE AS PROVIDED AND CERTIFIED BY KENNETH P. FRANK, PROFESSIONAL LAND SURVEYOR, KP2T PROFESSIONAL LAND SURVEYORS

MAP/PANEL - 34025C0184
SUFFIX - H
FIRM INDEX DATE - 06-15-2022
FIRM PANEL EFF. REVISED DATE - 06-15-2022
FLOOD ZONE - AE (EL 9)
BASE FLOOD ELEVATION(S) - NA



SITE PLAN

SCALE: 1"=20'

IMPROVEMENT LEGEND

- EXISTING & APPROVED BUILDING COVERAGE
- PROPOSED FLOOR AREA
- PROPOSED BUILDING COVERAGE REAR ROOF
- PROPOSED LOT COVERAGE DRIVEWAY
- PROPOSED LOT COVERAGE DRIVEWAY, MASONRY APRONS, PATIO
- EXCLUDED WALKWAYS PER SCHEDULE 5-1, NOTE 5.a
- EXCLUDED PATIO PER SCHEDULE 5-1, NOTE 5.b

MAXIMUM PERMITTED FLOOR AREA RATIO PER SCHEDULE 5-3A

FACTOR	UASABLE LOT AREA	F.A.R. PERMITTED	MAXIMUM PERMITTED FLOOR AREA		
USABLE LOT AREA OF LOT IF LESS THAN OR EQUAL TO 5,000 SF – USE 5,000 SF IF USABLE LOT AREA IS OVER 5,000 SF	5,000 SF	(X) 0.4	2,000 SF	–	–
USABLE LOT AREA OF LOT OVER 5,000 SF – USE 5,000 SF IF USABLE LOT AREA IS 10,000 SF OR MORE.	5,000 SF	(X) 0.3	1,500 SF	–	–
USABLE LOT AREA OF LOT OVER 10,000 SF – USE 60,000 SF IF USABLE LOT AREA IS 70,000 SF OR MORE.	51,259.87 SF	(X) 0.1	5,125.98 SF	–	–
ADD MAX. PERMITTED FA COLUMNS	–	–	8,625.98 SF	–	–
MAXIMUM PERMITTED FAR	–	–	.14	–	–

	PERMITTED / ALLOW.	EXISTING / APPROVED PER ZONING PERMIT - 4/26/2024	PROPOSED	COMPLIES	VARIANCE REQUIRED
FLOOR AREA SUMATION	8,626 SF	8,792.4 SF	9,250 SF (*457.5 SF)	NO	YES

*EXISTING CABANA, NEW WINE ROOM AND EXTERIOR TOILET

ZONING CHART

(718) 351-5475
(973) 361-2644
FAX (973) 361-5851

DAVID J. DARCY, RA
ARCHITECT
800 SIXTH AVENUE SUITE 702
POINT PLEASANT BEACH, NJ 08742

N. Y. REGISTRATION No. 023831
N. J. REGISTRATION No. 17070
P. A. LICENSE No. RA406637

NO.	ISSUE / REVISION	DATE	BY
19	ZONING CHART REVISIONS	11/6/25	DD
18	REVISIONS TO PLAN – NOTES. DIM AND PERGOLA	10/30/2000	
17	BC AND LC REVISIONS	9/5/25	DD
16	REVISIONS BASED UPON ZO LETTER	7/15/25	DD
15	REVISIONS BASED UPON DENIAL LETTER	5/31/25	DD
14	VARIANCE CALC. REVISED	1/24/25	DD
13	SITE PHOTOS	1/15/25	DD
12	REVISED ZONING FOR VARIANCE	11/1/24	DD
11	REV. FOR MASONRY & COVERED PORCH	10/30/2400	
10	REVISED ZONING FOR VARIANCE	9/24/24	DD
9	ISSUE SET TO TOWN	4/24/24	DD
8	ISSUE FOR ZONING REVIEW	4/02/24	DD
7	ISSUE SET TO TOWN	3/5/24	DD
6	PERGOLA/POOL CHANGES	2/20/24	DD
5	GRADES AT REAR	1/5/24	DD
4	REVISIONS FOR ZONING REVIEW	9/24/23	DD
3	REVISIONS FOR ZONING REVIEW	9/14/23	DD
2	ISSUE SET TO TOWN ZONING REVIEW	7/24/23	DD
1	ISSUE SET TO TOWN	6/26/23	DD

PROJECT TITLE:
PROPOSED ALTERATION / EXT. TO A ONE FAMILY RES. FOR MR. & MRS. CINA
16 HARBOR DRIVE
BOROUGH OF RUMSON, NJ

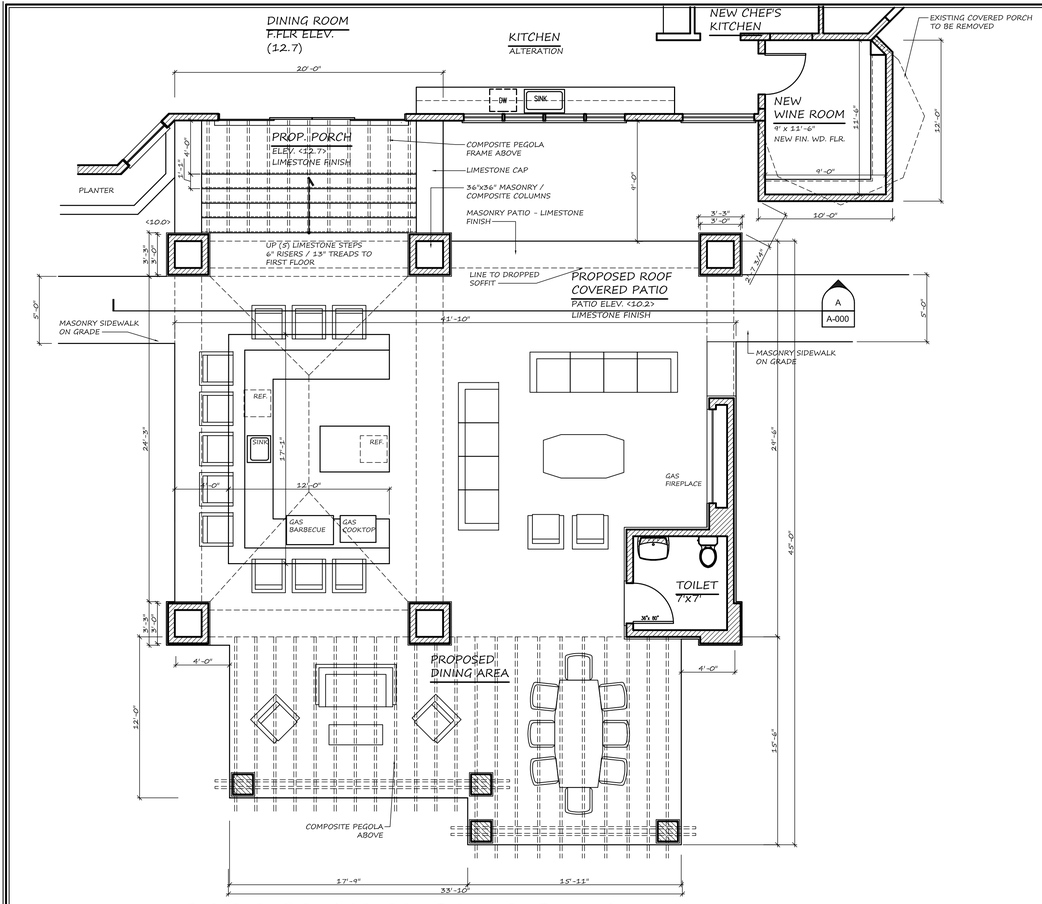
TOTAL AREA:

SHEET TITLE:
ARCHITECTURAL PLOT PLAN, ZONING INFORMATION & GENERAL NOTES

PROJECT NO: 23-800
DATE: 6/15/2023
SCALE: AS NOTED
DESIGNED BY: DD
REVIEWED BY: DD
APPROVED BY: DD

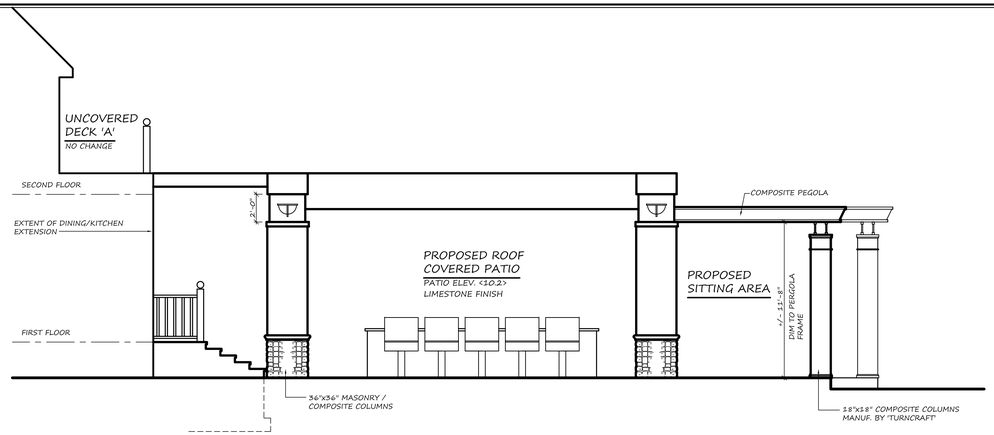
ARCHITECT SEAL

SHEET NO.
A-001.02



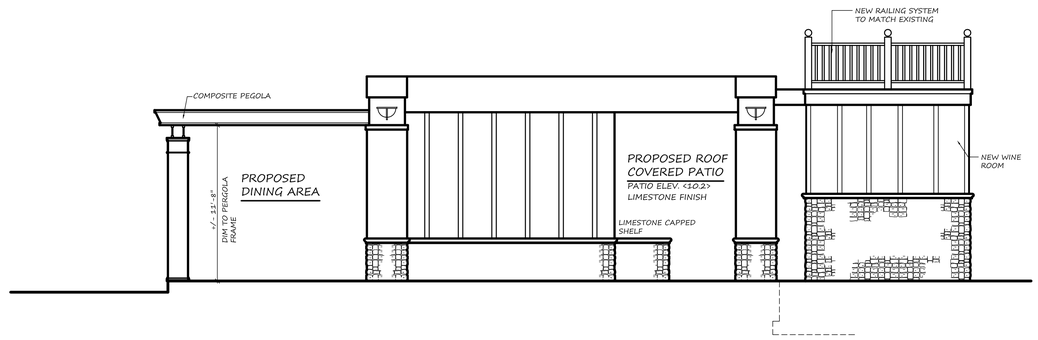
ROOF COVERED PATIO PLAN

SCALE: 3/16"=1'-0"



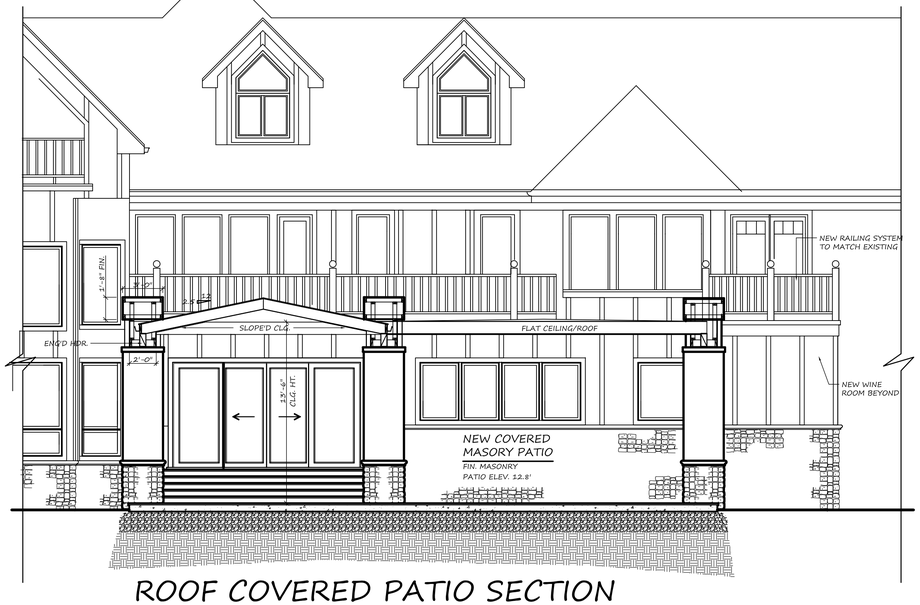
ROOF COVERED PATIO LEFT SIDE ELEV.

SCALE: 1/4"=1'-0"



ROOF COVERED PATIO SIDE ELEVATION

SCALE: 3/16"=1'-0"



ROOF COVERED PATIO SECTION

SCALE: 3/16"=1'-0"



ROOF COVERED PATIO - REAR ELEVATION

SCALE: 3/16"=1'-0"

GENERAL NOTES:

PATIO ELEV. 10.2'

REFER TO STRUCTURAL DRAWINGS S-100.00 AS PREPARED BY ROGERS CALVANICO GROUP FOR MASONRY FOUNDATION, SLAB SPECIFICATIONS AND PERGOLIA AND ROOF STRUCTURAL DESIGN.

It is a violation of the law for any person, unless acting under the direction of a licensed architect, to alter an item in any way. If an item bearing the seal of an architect is altered, the altering architect shall affix to his item the seal and the notation "altered by" followed by his signature and the date of such alteration, and a specific description of the alteration.

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ARCHITECT
N. Y. REGISTRATION No. 023831
N. J. REGISTRATION No. 17070
P. A. LICENSE No. RA406637

NO.	ISSUE / REVISION	DATE	BY
2	PERGOLA REVISIONS	10/20/25	DD
1	REV. TO DESIGN, COVERED MAS PORCH	10/3/24	DD

PROJECT TITLE:

PROPOSED ALTERATION TO A ONE FAMILY RES. FOR MR. & MRS. CINA

16 HARBOR DRIVE
RUMSON, NJ

SHEET TITLE:

ARCHITECTURAL REAR MASONRY PROCH PLAN, SECTION & ELEVATIONS

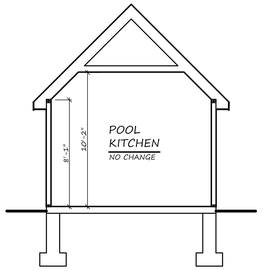
PROJECT NO:	23-820
DATE:	1/24/2023
SCALE:	AS NOTED
DESIGNED BY:	DD
REVIEWED BY:	DD
APPROVED BY:	DD

ARCHITECT SEAL

SHEET NO.

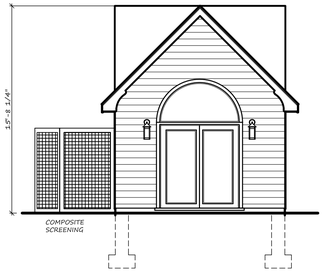
SK-001.00

SHEET 1 OF 2



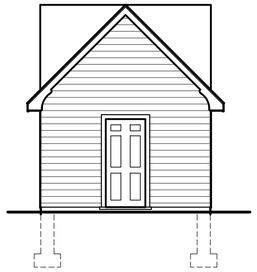
CABANA SECTION

SCALE: 1/4"=1'-0"



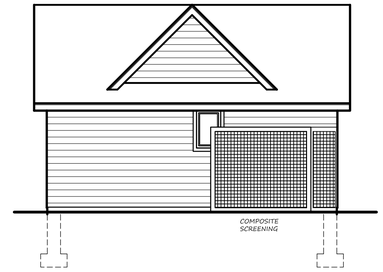
CABANA FRONT ELEVATION

SCALE: 1/4"=1'-0"



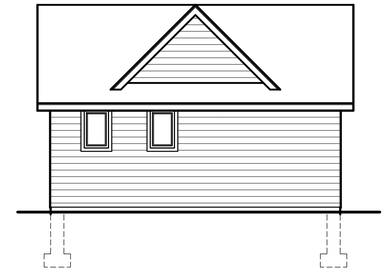
CABANA REAR ELEVATION

SCALE: 1/4"=1'-0"



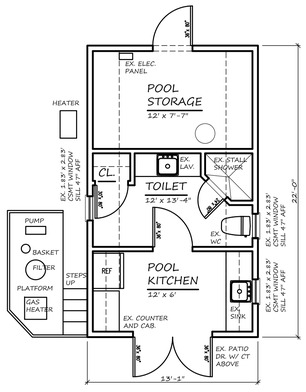
CABANA LEFT SIDE ELEVATION

SCALE: 1/4"=1'-0"



CABANA RIGHT SIDE ELEVATION

SCALE: 1/4"=1'-0"



CABANA PLAN

SCALE: 1/4"=1'-0"

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N. J. REGISTRATION No. 17070
P. A. LICENSE No. RA406637

NO.	ISSUE / REVISION	DATE	BY
1	REV. TO DESIGN, COVERED WAS PORCH	11/5/24	DD

PROJECT TITLE:

PROPOSED ALTERATION
TO A ONE FAMILY RES.
FOR MR. & MRS. CINA

16 HARBOR DRIVE
RUMSON, NJ

SHEET TITLE:

ARCHITECTURAL PLAN, SECTION AND ELEVATIONS FOR EXISTING POOL CABANA

PROJECT NO:	23-820
DATE:	9/26/2024
SCALE:	AS NOTED
DESIGNED BY:	DD
REVIEWED BY:	DD
APPROVED BY:	DD

ARCHITECT SEAL

SHEET NO.

SK-002.00



PHOTOGRAPH #1



PHOTOGRAPH #2



PHOTOGRAPH #3



PHOTOGRAPH #4



PHOTOGRAPH #5



PHOTOGRAPH #6



PHOTOGRAPH #7



PHOTOGRAPH #8

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ARCHITECT

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P. A. LICENSE No. RA406637

NO.	ISSUE / REVISION	DATE	BY

PROJECT TITLE:
PROPOSED ALTERATION / EXT. TO A ONE FAMILY RES. FOR MR. & MRS. CINA
14 HARBOR DRIVE
BOROUGH OF RUMSON, NJ

TOTAL AREA:

SHEET TITLE:
SITE PHOTOGRAPHS FOR VARIANCE

PROJECT NO: 23-020
DATE: 1/15/2025
SCALE: AS NOTED
DESIGNED BY: DD
REVIEWED BY: DD
APPROVED BY: DD

ARCHITECT SEAL

SHEET NO.
PHOTO-1.0
SHEET 1 OF 2



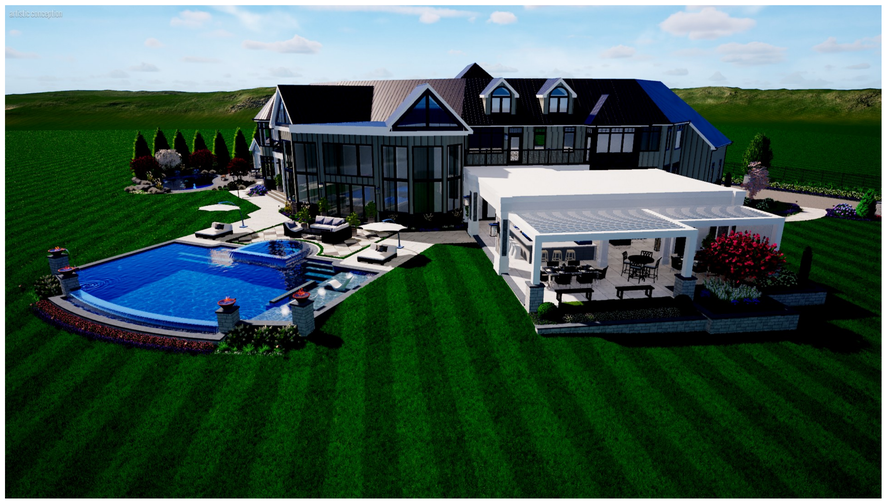
PHOTOGRAPH #9



SOUTHEAST RENDERING



PHOTOGRAPH #10



EAST RENDERING

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N. J. REGISTRATION No. 17070
P. A. LICENSE No. RA406637

NO.	ISSUE / REVISION	DATE	BY

PROJECT TITLE:
PROPOSED ALTERATION / EXT. TO A ONE FAMILY RES. FOR MR. & MRS. CINA

14 HARBOR DRIVE
BOROUGH OF RUMSON, NJ

TOTAL AREA:

SHEET TITLE:
SITE PHOTOGRAPHS & RENDERINGS FOR VARIANCE

PROJECT NO: 23-820
DATE: 1/15/2025
SCALE: AS NOTED
DESIGNED BY: DD
REVIEWED BY: DD
APPROVED BY: DD

ARCHITECT SEAL

SHEET NO.
PHOTO-2.0

ZONING CHART:

BOROUGH OF RUMSON SCHEDULE 5-1	PERMITTED / ALLOWABLE	EXISTING	PROPOSED	COMPLIES	VARIANCE REQUIRED
ZONING DISTRICT	R-2	EXISTING SINGLE-FAMILY RESIDENCE	EXISTING SINGLE-FAMILY RESIDENCE	YES	NO
MIN. LOT AREA (INTERIOR LOT)	1.0 ACRE (43,560 SF)	1.406 ACRE (61,259.88 SF)	1.406 ACRE (61,259.88 SF)	YES	NO
MIN. LOT WIDTH AND FRONTAGE	150 FT.	150 FT.	150 FT.	YES	NO
INTERIOR SHAPE LOT	100 FT.	➢ 100 FT.	➢ 100 FT.	YES	NO
MIN. YARD REQUIREMENTS (PRINCIPAL BUILDING)					
FRONT YARD	75 FT.	76.2 FT.	75.0 FT. AT CORNER OF PERGOLA	NO	NO
ONE SIDE YARD	25 FT.	53.5 FT.	53.5 FT.	YES	NO
TOTAL OF (2) SIDE YARDS	50 FT.	NA	NA	YES	NO
REAR YARD	40 FT.	55.8 FT.	41.33 FT. (ACCESSORY PERGOLA)	YES	NO
MIN. YARD REQUIREMENTS (ACCESSORY BUILDING - CABANA)					
SIDE YARD	15 FT.	NA	NA	YES	NO
REAR YARD	15 FT.	19.3 FT.	19.3 FT.	YES	NO
MIN. YARD REQUIREMENTS (ACCESSORY STRUCTURE)					
SIDE YARD	15 FT.	NA	NA	YES	NO
REAR YARD	15 FT.	NA	NA	YES	NO
MAX. BUILDING HEIGHT (PRINCIPAL BUILDING)					
STORIES	2 ½	2 ½	2 ½	YES	NO
HEIGHT RIDGE	40 FT.	39.3 FT.	39.3 FT.	YES	NO
HEIGHT EAVE	32 FT.	19 FT.	19 FT.	YES	NO
MAX. BUILDING HEIGHT (ACCESSORY BUILDING CABANA)					
STORIES	1 ½	1	1	YES	NO
HEIGHT	24 FT.	15 FT.	15 FT.	YES	NO

BOROUGH OF RUMSON LAND USE ORDINANCE UNDER SECTION 22-7.32 – LOTS BORDERING ON A RIVER					
SECTION 22-7.32 - b.1 & b.2	PERMITTED / ALLOWABLE	EXISITNG	PROPOSED	COMPLIES	VARIANCE REQUIRED
b.1 - PRIVATE INGROUND SWIMMING POOL AND RELATED STRUCTURES	25 FT.		NEW SWIMMING POOL PLANTER – 45.0 FT.	YES	NO
		EX. SWIMMING POOL – 19.75 FT.	EX. SWIMMING POOL (KOI POND) – 19.75 FT.	NO	YES
b.2 - PRINCIPAL OR ACCESSORY STRUCTURE – EXISTING CABANA	50 FT.	PRINCIPAL BLDG. – 55.8 FT.	PRINCIPAL/ACC (PERGOLA) – 41.33 FT.	NO	YES
		EX. CABANA – 19.3 FT.	EX. CABANA – 19.3 FT.	NO	YES
MAXIMUM LOT AND BUILDING COVERAGE PER SCHEDULE 5-4 (LOTS 10,000 SF – 70,000 SF)					
LOT COVERAGE CALCULATIONS					
SCHEDULE 5-4	PERMITTED / ALLOWABLE	EXISTING / APPROVED PER ZONING PERMIT - 4/26/2024	PROPOSED	COMPLIES	VARIANCE REQUIRED
3,970.00 SF + (0.1915 X 51,259.87 SF)	13,788.26 SF	12,040.29 SF Actual = 12,969 SF	18,748 SF	NO	YES
*EXISTING KOI POND (837 SF), INGROUND POOL/SPA (1399 SF) = 2,236 SF PORTION OF THE VARIANCE REQUEST, ABOVE					
BUILDING COVERAGE CALCULATIONS					
SCHEDULE 5-4	PERMITTED / ALLOWABLE	EXISTING / APPROVED PER ZONING PERMIT - 4/26/2024	PROPOSED	COMPLIES	VARIANCE REQUIRED
2,095.00 SF + (0.0620 X 51,259.87 SF)	5,273 SF	5,962 SF (13.1% OVER)	**7,659 SF	NO	YES
**EXISTING CABANA, REAR ROOF COVERED PATIO, AND COVERED ENTRANCE PORCH					

MAXIMUM PERMITTED FLOOR AREA RATIO PER SCHEDULE 5-3A					
FACTOR	UASABLE LOT AREA	F.A.R. PERMITTED	MAXIMUM PERMITTED FLOOR AREA		
USABLE LOT AREA OF LOT IF LESS THAN OR EQUAL TO 5,000 SF – USE 5,000 SF IF USABLE LOT AREA IS OVER 5,000 SF	5,000 SF	(X) 0.4	2,000 SF	-	-
USABLE LOT AREA OF LOT OVER 5,000 SF – USE 5,000 SF IF USABLE LOT AREA IS 10,000 SF OR MORE.	5,000 SF	(X) 0.3	1,500 SF	-	-
USABLE LOT AREA OF LOT OVER 10,000 SF – USE 60,000 SF IF USABLE LOT AREA IS 70,000 SF OR MORE.	51,259.87 SF	(X) 0.1	5,125.98 SF	-	-
ADD MAX. PERMITTED FA COLUMNS	-	-	8,625.98 SF	-	-
MAXIMUM PERMITTED FAR	-	-	.14	-	-
	PERMITTED / ALLOW.	EXISTING / APPROVED PER ZONING PERMIT - 4/26/2024	PROPOSED	COMPLIES	VARIANCE REQUIRED
FLOOR AREA SUMATION	8,626 SF	8,792.4 SF (2.0% OVER)	9,250 SF (7.2% OVER) *457.5 SF	NO	YES
*EXISTING CABANA, NEW WINE ROOM AND EXTERIOR TOILET					

REV.	DATE	DESCRIPTION

TRE
■ Civil Engineers
■ Forensic Experts
■ Environmental Consultants
TWO RIVER ENGINEERING
www.tworivereng.com
P.O. Box 155
Colts Neck, N.J. 07722
Tel: 732.866.0111
Fax: 732.866.4348

PROJECT NO.: 23112
DATE: AUGUST 11, 2025
DRAWING NO.: 23112PP
DRAWN BY: AJG
CLIENT: CINA
SCALE: AS SHOWN

NJDEP PERMIT PLAN
BUILDING PERMIT
PLOT PLAN
SOIL EROSION AND SEDIMENT CONTROL PLAN

16 HARBOR DRIVE
FOR
BLOCK 111
LOT 22
BOROUGH OF RUMSON
MONMOUTH COUNTY
NEW JERSEY

A.J. CARITO, JR.
08-11-25
DATE
N.J. Professional Engineer
License No. 24GE03799700

'R-2' RESIDENTIAL ZONE DISTRICT

	REQUIRED	PROPOSED	VARIANCE
ACCESSORY STRUCTURES			
REAR YARD SETBACK	15 FT	124.78 FT (PATIO)	NO
SIDE YARD SETBACK	15 FT	55.75 FT (PATIO)	NO
MAXIMUM LOT AND BUILDING COVERAGE	30%	34.6%	YES



KEY MAP

PROPOSED BUILDING COVERAGE CALCULATION

BUILDING	5,357 SF
MAIN FRONT PORCH	220 SF
WINE ROOM	120 SF
SIDE FRONT PORCH	45 SF
REAR COVERED PORCH	90 SF
PERGOLA OFF DWELLING	180 SF
REAR ROOF COVERED PATIO	1,234 SF
CABANA	287 SF
FIRST FLOOR OPEN DECK	126 SF
TOTAL	7,659 SF
LOT AREA	61,260 SF
BUILDING COVERAGE	12.5%

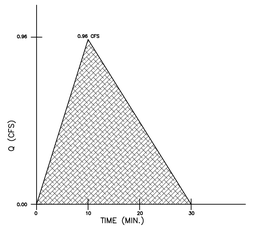
PROPOSED LOT COVERAGE CALCULATION

DWELLING	5,357 SF
DRIVEWAY APRON	292 SF
DRIVEWAY	5,926 SF
MASONRY PIERS	50 SF
FRONT WALKWAY	56 SF*
FRONT PORCH	220 SF
FRONT PORCH STEPS	27 SF
FRONT MASONRY WALKWAY	303 SF*
FRONT AC PAD	90 SF
PERGOLA OFF DWELLING	180 SF
COVERED REAR MASONRY PATIO	1,234 SF
REAR MASONRY PERGOLA	460 SF
NEW WINE ROOM	120 SF
WALKWAY TO POOL PATIO	48 SF
STEPS TO POOL PATIO	114 SF
NEW POOL PATIO	1,227 SF
FIRST FLOOR OPEN DECK	126 SF
FIRST FLOOR OPEN DECK STEPS	44 SF
WALKWAY FROM OPEN DECK	473 SF
REAR COVERED PORCH	90 SF
REAR COVERED PORCH STEPS	21 SF
BLUESTONE PATIO (TO BE REMOVED)	
KIO POND WALKWAY	373 SF*
FRONT COVERED PORCH	45 SF
2' CONCRETE APRON	85 SF
GARDEN STONE WALLS	100 SF*
CABANA	287 SF
CONC. EQUIP PAD	110 SF
IN-GROUND POOL AND SPA	1,399 SF
KOI POND	837 SF
	19,694 SF
TOTAL	18,862 SF*
LOT AREA	61,260 SF
LOT AND BUILDING COVERAGE	30.8%

*EXCLUDED FROM LOT COVERAGE PER SCHEDULE 5-1 (5)

EXISTING IMPERVIOUS = 14,972 SF
PROPOSED IMPERVIOUS = 21,191 SF
ADDITIONAL IMPERVIOUS = 6,219 SF

EXISTING 25 YEAR STORM VOLUME



EXISTING FLOW CALCULATIONS
25 YEAR STORM (Q=CiA)

A = 6,219 SF (0.143 AC)
i = 6.8 in/hr
c = 0.99
Tc = 10 min
Q = 0.96 cfs

AREA UNDER CURVE = 612 CF

PROPOSED VOLUME - EXISTING VOLUME = 864 CF

19-CHAMBERS ARE PROVIDED TO CAPTURE THE ADDITIONAL RUNOFF
(DESIGN CAPACITY OF EACH CHAMBER 45.9 C.F.) (872 CF TOTAL CAPACITY)

GRAPHIC SCALE

20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

PROPOSED CONDITIONS

SOUTH SHREWSBURY RIVER

LOT 23

HARBOR DRIVE
(50' WIDE R.O.W.)

N28°41'52"W 39.49'
N39°21'37"E 66.47'
N22°24'18"E 29.51'
N5°19'41"W 20.49'
N11°40'37"E 48.73'
N46°03'27"E 85.13'
N79°31'59"E 29.89'
S29°39'06"E 22.81'
S53°13'10"E 6.02'
S72°03'10"E 40.0'
S79°53'40"E 44.84'
S81°30'00"E 17.79'
N68°34'14"E 41.26'
N8°30'00"E 65.00'
N81°30'00"W 12.00'
S8°30'00"W 65.00'
S8°30'00"W 215.25'
(FILE MAP 215')
S66°58'02"W 219.14'
(FILE MAP 222.84')

R=50.00', L=150.00

BLOCK 111
LOT 22
61,260 S.F.
1.406 ACRES

BLOCK 111
LOT 22.01
REVOCABLE LICENSE AS DESCRIBED
IN DB 5303, PG 448
780 S.F.

BLOCK 111
LOT 22.01
RIPARIAN GRANT

LOT 21

LAGOON
(60' WIDE PRIVATE LAGOON)
P/O GRANT TO JOSEPH E. SIDOTI, ET. ALS
6/9/1977, LIBER 0-6 PAGE 1, ETC., FILE 73-290
ALSO DESCRIBED IN DB 4038, PG 538.

FILE MAP LOT LINE
LINE OF GRANT

LOT 13
LOT 12

P.O.B. IRON BAR W/CAP FOUND
POINT OF BEGINNING 1,275.83' SOUTHERLY FROM THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE HARBOR DRIVE WITH THE EASTERLY RIGHT OF LINE OF RIVERS EDGE DRIVE IF BOTH LINES WERE EXTENDED TO A POINT.

P.O.B. DB 4038 PG 538

PK NAIL FOUND

PROPOSED ROOF COVERED MASONRY PATIO AND EXTERIOR KITCHEN (1234 SF) FF 10.5
PROPOSED PERGOLA AND MASONRY PATIO (460 SF) FF 10.5
PROPOSED EXT. TOILET
PROPOSED MASONRY WALKWAY (48 SF)
PROPOSED MASONRY POOL
PROPOSED MASONRY POOL PATIO (1227 SF)
PROPOSED MASONRY WALKWAY (473 SF)
PROPOSED MASONRY WALKWAY (373 SF)
PROPOSED FRONT MASONRY WALKWAY (303 SF)
PROPOSED CONCRETE AC PAD (90 SF)
PROPOSED PERGOLA (180 SF)
PROPOSED COVERED PORCH (220 SF)
PROPOSED BRICK PAVER APRON
PROPOSED BRICK PAVER WALKWAY (56 SF)
PROP. CONC. PAD
PROPOSED PLANTER
PROPOSED LIMIT OF DRIVEWAY EXPANSION
PROPOSED 2' WIDE CONC. APRON (85 SF)
PROPOSED DWY APRON (292 SF)
EXISTING 12' WIDE DRIVEWAY EXPANDED TO 15' WIDE MAX.
EXIT. GRAVEL DRIVE TO REMAIN (5,926 SF)
EXISTING SCREENED IN PORCH TO BE CONVERTED TO WINE ROOM (120 SF)
GARAGE G.F.=8.6'
2 1/2 STORY FRAME DWELLING C.S.E.=8.1' ROOF PEAK=49.1' (5,357 SF)
No. 16
F.F.=12.7' ±
F.F.=11.8'
F.F.=12.7'
FF 12.2
FF 10.7
FF 11.7
FF 9.7
41.82
29.50
33.67
MASONRY PIERS (50 SF)
EXISTING BLUESTONE PATIO (TO BE REMOVED)
EXISTING POOL AND HOT TUB TO BE CONVERTED TO KIO POND
EXISTING GARDEN WALL TO REMAIN
EXIST. CABANA TO REMAIN
INGROUND POOL
HOT TUB
POOL EQUIP.
A/C UNIT
STONE WALL
FENCE
RAMP
FLOATING DOCK
WOOD DOCK
WOOD WALK
BULKHEAD (TYP.)
WOOD PILE (TYP.)
BUILDING SETBACK LINE (TYP.)
FIRST FLOOR DECK W/OPEN DECK ABOVE (126 SF)
LINE OF GRANT
NJ PIERHEAD LINE
NJ COMBINED PIERHEAD AND BULKHEAD LINE
NJ TIDELANDS CLAIMED (554 S.F.)
NJ TIDELANDS CLAIMED (15 S.F.)
LADDER
FENCE 0.3'(S)
TRANSFORMER
BIRDHOUSE
MANHOLE RIM=6.10'
UTILITY BOX
WATER VALVES
GRANITE BLOCK CURB
PROPOSED 18 LF DEP. CURB
MAILBOX
TREE (TYP.)
YARD INLET 'BUBBLE BASIN' TG 7.6 INV. 4.0
6 CHAMBER TRENCH SYSTEM INV. 4.3 (IN) BOTTOM ELEV. 3.8
18 LF 6" ADS PIPE AT 1.0% MIN.
30 LF 6" ADS PIPE AT 1.0% MIN.
2 CHAMBER TRENCH SYSTEM INV. 4.3 (IN) BOTTOM ELEV. 3.8
YARD INLET 'BUBBLE BASIN' TG 7.2 INV. 4.0
YARD INLET 'BUBBLE BASIN' TG 7.6 INV. 4.0
6 CHAMBER TRENCH SYSTEM INV. 4.3 (IN) BOTTOM ELEV. 3.8
18 LF 6" ADS PIPE AT 1.0% MIN.
STEPS (114 SF)
STEPS
STEPS
COVERED PORCH 45 SF
COVERED PORCH 90 SF
ELEC. METER
GAS METER
CONCRETE APRON (TYP.)
ORNAMENTAL ALUMINUM FENCE
BUILDING SETBACK LINE (TYP.)
ROSE WALK
LINE OF GRANT
BULKHEAD (TYP.)
WOOD DOCK
RAMP
FLOATING DOCK
WOOD PILE (TYP.)
WOOD WALK
BULKHEAD (TYP.)
WOOD PILE (TYP.)
NJ PIERHEAD LINE
FLOATING DOCK
WOOD DOCK
N8°30'00"E 65.00'
N81°30'00"W 12.00'
S8°30'00"W 65.00'

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REV.	DATE	DESCRIPTION
1	11-1-25	GENERAL REVISIONS

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PROJECT NO.: 23112
DATE: AUGUST 11, 2025
DRAWING NO.: 23112PP
DRAWN BY: AJG
CLIENT: CINA
SCALE: AS SHOWN

NJDEP PERMIT PLAN
BUILDING PERMIT
PLOT PLAN
SOIL EROSION AND SEDIMENT CONTROL PLAN
16 HARBOR DRIVE
FOR
BLOCK 111
LOT 22
BOROUGH OF RUMSON
MONMOUTH COUNTY
NEW JERSEY

A.J. GARITO, JR.
11-01-25
DATE
N.J. Professional Engineer
License No. 24GE03799700

SHEET NO. 2 OF 5

ZONING CHART:

BOROUGH OF RUMSON SCHEDULE 5-1	PERMITTED / ALLOWABLE	EXISTING	PROPOSED	COMPLIES	VARIANCE REQUIRED
ZONING DISTRICT	R-2	EXISTING SINGLE-FAMILY RESIDENCE	EXISTING SINGLE-FAMILY RESIDENCE	YES	NO
MIN. LOT AREA (INTERIOR LOT)	1.0 ACRE (43,560 SF)	1.406 ACRE (61,259.88 SF)	1.406 ACRE (61,259.88 SF)	YES	NO
MIN. LOT WIDTH AND FRONTAGE	150 FT.	150 FT.	150 FT.	YES	NO
INTERIOR SHAPE LOT	100 FT.	➢ 100 FT.	➢ 100 FT.	YES	NO
MIN. YARD REQUIREMENTS (PRINCIPAL BUILDING)					
FRONT YARD	75 FT.	76.2 FT.	75.5 FT. AT CORNER OF PERGOLA	YES	NO
ONE SIDE YARD	25 FT.	53.5 FT.	53.5 FT.	YES	NO
TOTAL OF (2) SIDE YARDS	50 FT.	NA	NA	YES	NO
REAR YARD	25 FT.	55.8 FT.	41.9 FT. (ACCESSORY PERGOLA)	NO	YES
MIN. YARD REQUIREMENTS (ACCESSORY BUILDING - CABANA)					
SIDE YARD	15 FT.	NA	NA	YES	NO
REAR YARD	25 FT.	19.3 FT.	19.3 FT.	NO	YES
MIN. YARD REQUIREMENTS (ACCESSORY STRUCTURE)					
SIDE YARD	15 FT.	NA	NA	YES	NO
REAR YARD	15 FT.	NA	NA	YES	NO
MAX. BUILDING HEIGHT (PRINCIPAL BUILDING)					
STORIES	2 ½	2 ½	2 ½	YES	NO
HEIGHT RIDGE	40 FT.	39.3 FT.	39.3 FT.	YES	NO
HEIGHT EAVE	32 FT.	19 FT.	19 FT.	YES	NO
MAX. BUILDING HEIGHT (ACCESSORY BUILDING CABANA)					
STORIES	1 ½	1	1	YES	NO
HEIGHT	24 FT.	15 FT.	15 FT.	YES	NO

Zoning Chart 8/5/2025

BOROUGH OF RUMSON LAND USE ORDINANCE UNDER SECTION 22-7.32 – LOTS BORDERING ON A RIVER					
SECTION 22-7.32 - b.1 & b.2	PERMITTED / ALLOWABLE	EXISITNG	PROPOSED	COMPLIES	VARIANCE REQUIRED
b.1 - PRIVATE INGROUND SWIMMING POOL AND RELATED STRUCTURES	25 FT.		NEW SWIMMING POOL PLANTER – 45.0 FT.	YES	NO
		EX. SWIMMING POOL – 19.75 FT.	EX. SWIMMING POOL (KOI POND) – 19.75 FT.	NO	YES
b.2 - PRINCIPAL OR ACCESSORY STRUCTURE – EXISTING CABANA	50 FT.	PRINCIPAL BLDG. – 55.8 FT.	PRINCIPAL/ACC (PERGOLA) – 41.9 FT.	NO	YES
		EX. CABANA – 19.3 FT.	EX. CABANA – 19.3 FT.	NO	YES
MAXIMUM LOT AND BUILDING COVERAGE PER SCHEDULE 5-4 (LOTS 10,000 SF – 70,000 SF)					
LOT COVERAGE CALCULATIONS					
SCHEDULE 5-4	PERMITTED / ALLOWABLE	EXISTING / APPROVED PER ZONING PERMIT - 4/26/2024	PROPOSED	COMPLIES	VARIANCE REQUIRED
3,970.00 SF + (0.1915 X 51,259.87 SF)	13,788.26 SF	12,040.29 SF Actual = 12,969 SF	18,862 SF	NO	YES
*EXISTING KOI POND (837 SF), INGROUND POOL/SPA (1399 SF) = 2,236 SF PORTION OF THE VARIANCE REQUEST, ABOVE					
BUILDING COVERAGE CALCULATIONS					
SCHEDULE 5-4	PERMITTED / ALLOWABLE	EXISTING / APPROVED PER ZONING PERMIT - 4/26/2024	PROPOSED	COMPLIES	VARIANCE REQUIRED
2,095.00 SF + (0.0620 X 51,259.87 SF)	5,273 SF	5,962 SF (13.1% OVER)	**7,659 SF	NO	YES
**EXISTING CABANA, REAR ROOF COVERED PATIO, AND COVERED ENTRANCE PORCH					

Zoning Chart 8/5/2025

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NJDEP PERMIT PLAN
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SOIL EROSION AND SEDIMENT CONTROL PLAN

16 HARBOR DRIVE

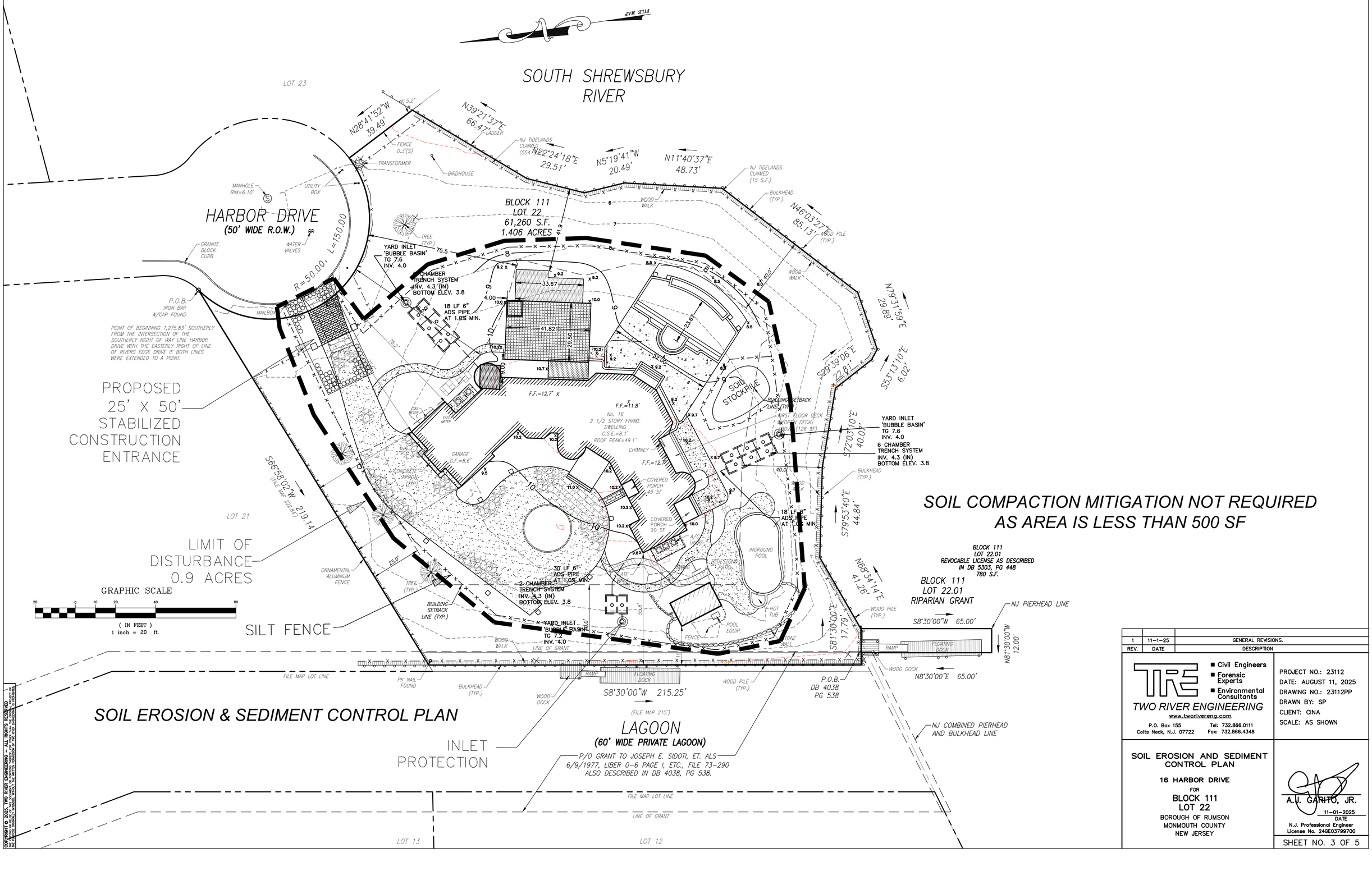
FOR

BLOCK 111
LOT 22

BOROUGH OF RUMSON
MONMOUTH COUNTY
NEW JERSEY

A.J. GARITO, JR.
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SOIL EROSION & SEDIMENT CONTROL PLAN



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TOPSOIL SCHEDULE

A. MATERIALS

1. TOPSOIL SHALL BE FRIABLE, LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES AND CONTAIN NO TOXIC SUBSTANCE OR ADVERSE CHEMICAL OR PHYSICAL CONDITION THAT MAY BE HARMFUL TO PLANT GROWTH. SOLUBLE SALTS SHALL NOT BE EXCESSIVE (CONDUCTIVITY LESS THAN 0.5 MILLIMHOS PER CENTIMETER. MORE THAN 0.5 MILLIMHOS MAY DESICATE SEEDLINGS AND ADVERSELY IMPACT GROWTH). TOPSOIL HAULED IN FROM OFFSITE SHALL HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.75 PERCENT. ORGANIC MATTER CONTENT MAY BE RAISED BY ADDITIVES.

2. TOPSOIL SUBSTITUTE IS A SOIL MATERIAL WHICH MAY HAVE BEEN AMENDED WITH SAND, SILT, CLAY, ORGANIC MATTER, FERTILIZER OR LIME AND HAS THE APPEARANCE OF TOPSOIL. TOPSOIL SUBSTITUTES MAY BE UTILIZED ON SITES WITH INSUFFICIENT TOPSOIL FOR ESTABLISHING PERMANENT VEGETATION. ALL TOPSOIL SUBSTITUTE MATERIALS SHALL MEET THE REQUIREMENTS OF TOPSOIL NOTED ABOVE. SOIL TESTS SHALL BE PERFORMED TO DETERMINE THE COMPONENTS OF SAND, SILT, CLAY, ORGANIC MATTER, SOLUBLE SALTS AND PH LEVEL.

B. STRIPPING AND STOCKPILING

1. FIELD EXPLORATION SHALL BE MADE TO DETERMINE WHETHER QUANTITY AND OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.
2. STRIPPING SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA.
3. LIME SHALL BE APPLIED BEFORE STRIPPING AT A RATE DETERMINED BY SOIL TESTS TO BRING THE SOIL PH TO APPROXIMATELY 6.5. IN LIEU OF SOIL TESTS, SEE THE LIME RATE GUIDE IN THE NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARD "SEEDBED PREPARATION FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION".
4. FULL-DEPTH TOPSOIL STRIPPING SHALL BE PERFORMED.
5. STOCKPILES OF TOPSOIL SHALL BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFFSITE ENVIRONMENTAL DAMAGE.
6. STOCKPILES SHALL BE VEGETATED IN ACCORDANCE WITH NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARD FOR "PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION" OR "TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION". WEEDS SHALL NOT BE ALLOWED TO GROW ON STOCKPILES.

C. SITE PREPARATION

1. GRADE AT THE ONSET OF THE OPTIMAL SEEDING PERIOD SO AS TO MINIMIZE THE DURATION AND AREA OF EXPOSURE OF DISTURBED SOIL TO EROSION. IMMEDIATELY PROCEED TO ESTABLISH VEGETATIVE COVER IN ACCORDANCE WITH THE SPECIFIED SEED MIXTURE. TIME IS OF THE ESSENCE.
2. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE. THE NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARD FOR "LAND GRADING" SHALL APPLY.
3. AS GUIDANCE FOR IDEAL CONDITIONS, SUBSOIL SHALL BE TESTED FOR LIME REQUIREMENT. LIMESTONE, IF NEEDED, SHALL BE APPLIED TO BRING SOIL TO A PH OF APPROXIMATELY 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
4. IMMEDIATELY PRIOR TO TOPSOILING, THE SURFACE SHALL BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS WILL HELP INSURE A GOOD BOND BETWEEN THE TOPSOIL AND SUBSOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.)
5. EMPLOY NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENTATION BASINS, AND WATERWAYS. SEE NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARDS AS APPLICABLE.

D. APPLY TOPSOIL

1. TOPSOIL SHALL BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE.
2. TOPSOIL SHALL BE APPLIED AT A UNIFORM DEPTH AS INIDCATED ON THE PLANS. SOILS WITH A PH OF 4.0 OR LESS CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A pH OF 5.0 OR MORE, IN ACCORDANCE WITH THE NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARD FOR "MANAGEMENT OF HIGH ACID PRODUCING SOIL".

NOTE: THE PLAN SHALL MEET THE STANDARDS FOR DEWATERING DEPICTED IN "THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY" AS SHOWN ON SHEET 14-1 TO 14-6.

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE FREEHOLD SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY.
2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RECERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
4. N.J.S.A. 4:24-39 ET.SEQ. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE DISTRICT DETERMINES THAT A PROJECT OR PORTION THEREOF IS IN FULL COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON WRITTEN REQUEST FROM THE APPLICANT, THE DISTRICT MAY ISSUE A REPORT OF COMPLIANCE WITH CONDITIONS ON A LOT BY LOT OR SECTION BY SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN IMPLIMENTED, INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK.
5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED FOR MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2-2½ TONS PER ACRE, ACCORDING TO THE STANDARD FOR STABILIZATION WITH MULCH ONLY.
6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. SOIL STOCKPILES, STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH ANCHOR, IN ACCORDANCE WITH STATE STANDARDS.
7. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF PRELIMINARY GRADING.
8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRE A STABILIZED CONSTRUCTION ACCESS CONSISTING OF 1" - 2" STONE FOR A MINIMUM LENGTH OF 10' EQUAL TO THE LOT ENTRANCE WIDTH. ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF.
9. ALL SOIL WASHED, DROPPED, SPILLED OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO THE PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY.
10. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.
11. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
12. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS / ACRE, (OR 450 LBS / 1000 SF OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12" OF SETTLED SOIL WITH A PH OF 5 OR MORE, OR 24" WHERE TREES OR SHRUBS ARE TO BE PLANTED.
13. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
14. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH STANDARD FOR DEWATERING.
15. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL.
16. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN. STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE WILL REQUIRE CERTIFICATION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN. CERTIFICATION OF A NEW SOIL EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000 SQUARE FEET IS DISTURBED.
17. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE #6.
18. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORM WATER OUTFALLS OR OFF SITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

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SEEDING SCHEDULE

1. TEMPORARY SEEDING SHALL CONSIST OF EITHER:

COOL SEASON GRASSES	RATES	SEEDING DATES	DEPTHS
PERENIAL RYEGRASS	1.0 LBS./S.F.	3/1-5/15 OR 8/15-10/1	0.5 IN.
SPRING OATS	2.0 LBS./S.F.	3/1-5/15 OR 8/15-10/1	1.0 IN.
WINTER BARLEY	2.2 LBS./S.F.	8/15-10/1	1.0 IN.
ANNUAL RYEGRASS	1.0 LBS./ S.F.	3/15-6/1 OR 8/1-9/15	0.5 IN.
WINTER CEREAL RYE	2.8 LBS./S.F.	8/1-11/15	1.0 IN.
WARM SEASON GRASSES			
PEARL MILLET	0.5 LBS./S.F.	5/15-8/15	1.0 IN.
MILLET (GERMAN OR HUNGARIAN)	0.7 LBS./S.F.	5/15-8/15	1.0 IN.

2. SITE PREPARATION (PERMANENT)

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.

B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING .

C. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.

D. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

SITE PREPARATION (TEMPORARY)

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING, PG. 19-1.

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

3. SEEDBED PREPARATION (PERMANENT)

A. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSIONS OFFICES (HTTP://NJAES.RUTGERS.EDU/COUNTY/). FERTILIZER SHALL BE APPLIED AT A RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING.

B. WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICLE TO A DEPTH OF 4 INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

C. HIGH ACID PRODUCING SOILS. SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED REPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.

4. SEEDBED PREPARATION (TEMPORARY)

A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES.

B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA BE RETILLED IN ACCORDANCE WITH THE ABOVE.

D. SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, PG. 1-1.

5. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, LUMPS OR ANY OTHER UNSUITABLE MATERIAL.

6. PERMANENT GROUND COVER OF SODDING OR SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE OR APPROVED EQUAL:

SEEDING	RATES
TALL FESCUE	6.0 LBS./1,000 S.F.
KENTUCKY BLUEGRASS (BLEND)	0.5 LBS./1,000 S.F.
PERENIAL RYEGRASS (BLEND)	0.5 LBS./1,000 S.F.

OPTIMAL SEEDING DATES: 8/15-10/15
ACCEPTABLE SEEDING DATES: 3/1-4/30 AND 5/1-8/14

SEED TO A DEPTH OF 0.5 IN.

7. THE SEEDING SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER OR LIGHT DRAG.

8. TACKING SHALL BE PERFORMED AS PER THE CURRENT STANDARDS OF THE FREEHOLD SOIL CONSERVATION DISTRICT. ASPHALT TACKIFIERS ARE NOT ACCEPTABLE.

9. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

A. STRAW OR HAY. UNNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

APPLICATION. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRIS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
2. MULCH NETTINGS. STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
3. CRIMPER (MULCH ANCHORING TOOL). A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
4. LIQUID MULCH-BINDERS. -MAY BE USED TO ANCHOR HAY OR STRAW MULCH.

A. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.

B. USE ONE OF THE FOLLOWING:

(1) ORGANIC AND VEGETABLE BASED BINDERS -NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.

(2) SYNTHETIC BINDERS -HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

NOTE: ALL NAMES GIVE ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A COMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

STANDARD FOR STABILIZATION WITH MULCH ONLY

1. SITE PREPARATION

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING.

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11-42.

2. PROTECTIVE MATERIALS

A. UNROTEED SMALL-GRAIN STRAW AT 2.0 TO 2.5 TONS PER ACRE IS SPREAD UNIFORMLY AT 90-115 POUNDS PER 1,000 S.F. AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN. THE APPROVED RATED ABOVE HAVE BEEN MET WHEN THE MULCH COVERS THE GROUND COMPLETELY UPON VISUAL INSPECTION, I.E. THE SOIL CANNOT BE SEEN BELOW THE MULCH.

C. SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE USED UNDER SUITABLE CONDITIONS AND IN QUANTITIES AS RECOMMENDED BY THE MANUFACTURER.

D. WOOD-FIBER OR PAPER-FIBERMULCH AT THE RATE OF 1,500 POUNDS PER ACRE (OR ACCORDING TO THE MANUFACTURER'S REQUIREMENTS) MAY BE APPLIED BY A HYDROSEEDER.

E. MULCH NETTING, SUCH AS PAPER JUTE, EXCELSIOR, COTTON, OR PLASTIC, MAY BE USED.

F. WOODCHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED. WOODCHIPS WILL NOT BE USED ON AREAS WHERE FLOWING WATER COULD WASH THEM INTO AN INLET AND PLUG IT.

G. GRAVEL, CRUSHED STONE, OR SLAG AT THE RATE OF 9 CUBIC YARDS PER 1,000 S.F. APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 3 INCHES MAY BE USED. SIZE 2 OR 3 (ASTM C-33) IS RECOMMENDED.

3. MULCH ANCHORING

MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OR THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA AND STEEPNESS OF SLOPES.

A. PEG AND TWINE - DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2-3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISSCROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.

B. MULCH NETTINGS - STAPLE PAPER, COTTON, OR PLASTIC NETTINGS OVER MULCH. USE DEGRADABLE NETTING IN AREAS TO BE MOWED. NETTING IS USUALLY AVAILABLE IN ROLLS 4 FEET WIDE AND UP TO 300 FEET LONG.

C. CRIMPER MULCH ANCHORING COULTER TOOL - A TRACTOR DRAWN IMPLEMENT ESPECIALLY DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOLID SURFACE. THIS PRACTICE AFFORDS MAXIMUM EROSION CONTROL, BUT ITS USE IS LIMITED TO THOSE SLOPES UPON WHICH THE TRACTOR CAN OPERATE SAFELY. SOIL PENETRATION SHOULD BE ABOUT 3 TO 4 INCHES. ON SLOPING LAND, THE OPERATION SHOULD BE ON THE CONTOUR.

D. LIQUID MULCH-BINDERS

1. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE.
2. USE ONE OF THE FOLLOWING:

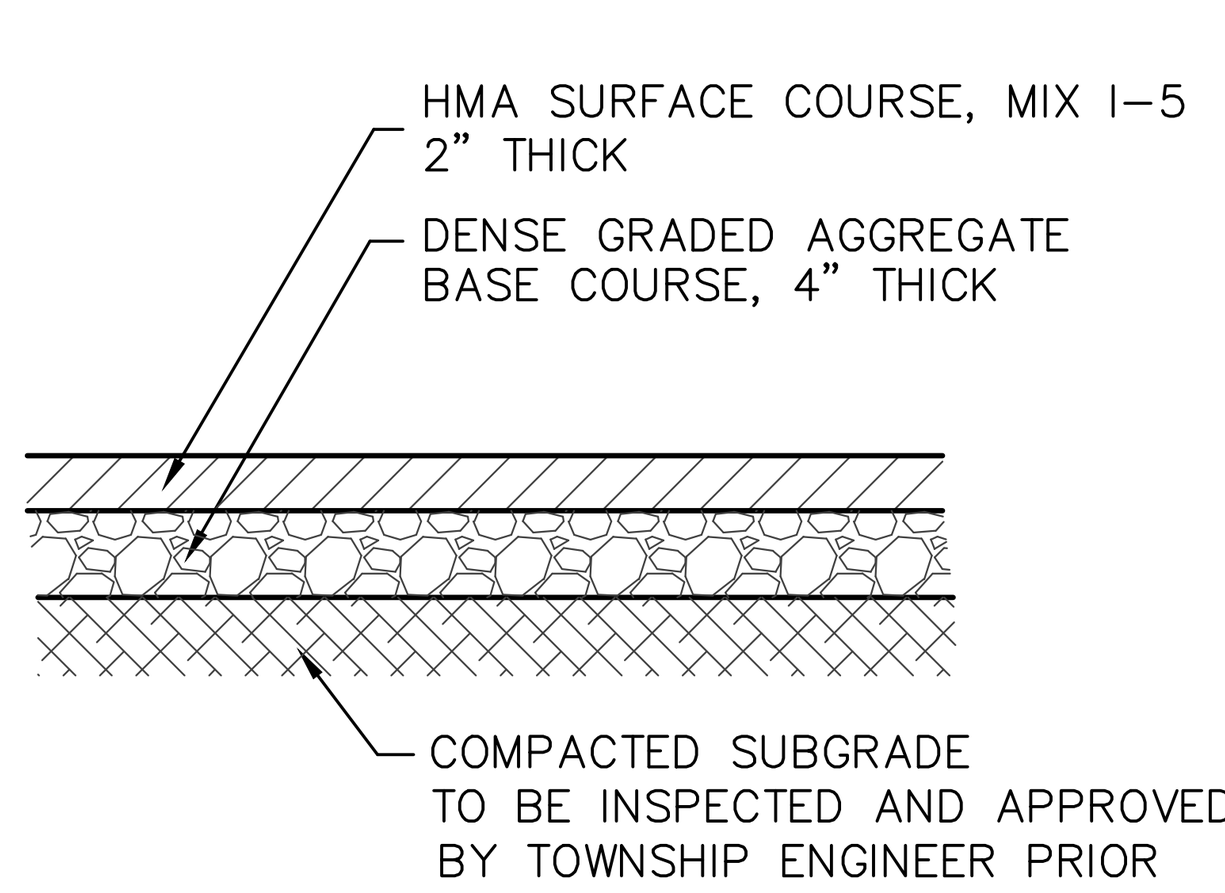
a. ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS THAT MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. VEGETABLE BASED GELS SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER.

b. SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

NOTE: MULCHING IS REQUIRED ON ALL SEEDING

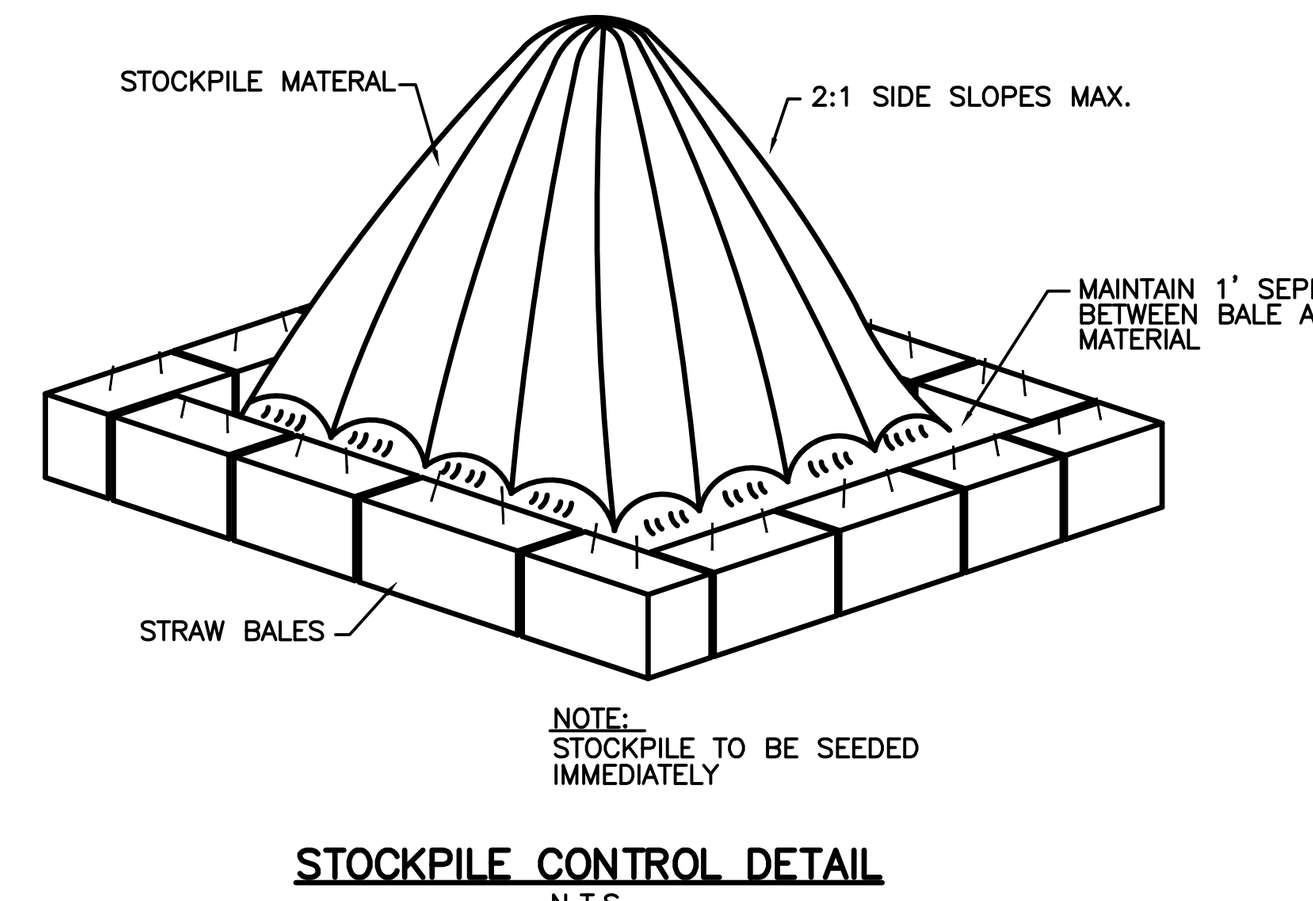
CONSTRUCTION SCHEDULE AND PROCEDURE FOR IMPLEMENTATION OF SOIL EROSION AND SEDIMENT CONTROL MEASURES

1. INSTALL SILT FENCE AND INLET PROTECTION.	1 DAY
2. PROVIDE TEMPORARY ACCESS PROTECTION (CONSTRUCTION ENTRANCE).	1 DAY
3. CLEAR ALLOWABLE VEGETATION.	2 DAYS
5. STRIP AND STOCKPILE TOPSOIL. APPLY TEMPORARY STABILIZATION.	2 DAYS
6. ESTABLISH ROUGH GRADES AS NECESSARY TO CONSTRUCT IMPROVEMENTS.	2 DAYS
7. CONSTRUCT IMPROVEMENTS.	3 MONTHS
8. CONSTRUCT FINE GRADING TO FINISHED GRADES, RE-SPREAD TOPSOIL AND ESTABLISH PERMANENT VEGETATIVE COVER ON THE LOT.	1 WEEK
9. REMOVE ACCESS PROTECTION, INLET PROTECTION, AND SILT FENCE AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED.	1 DAY



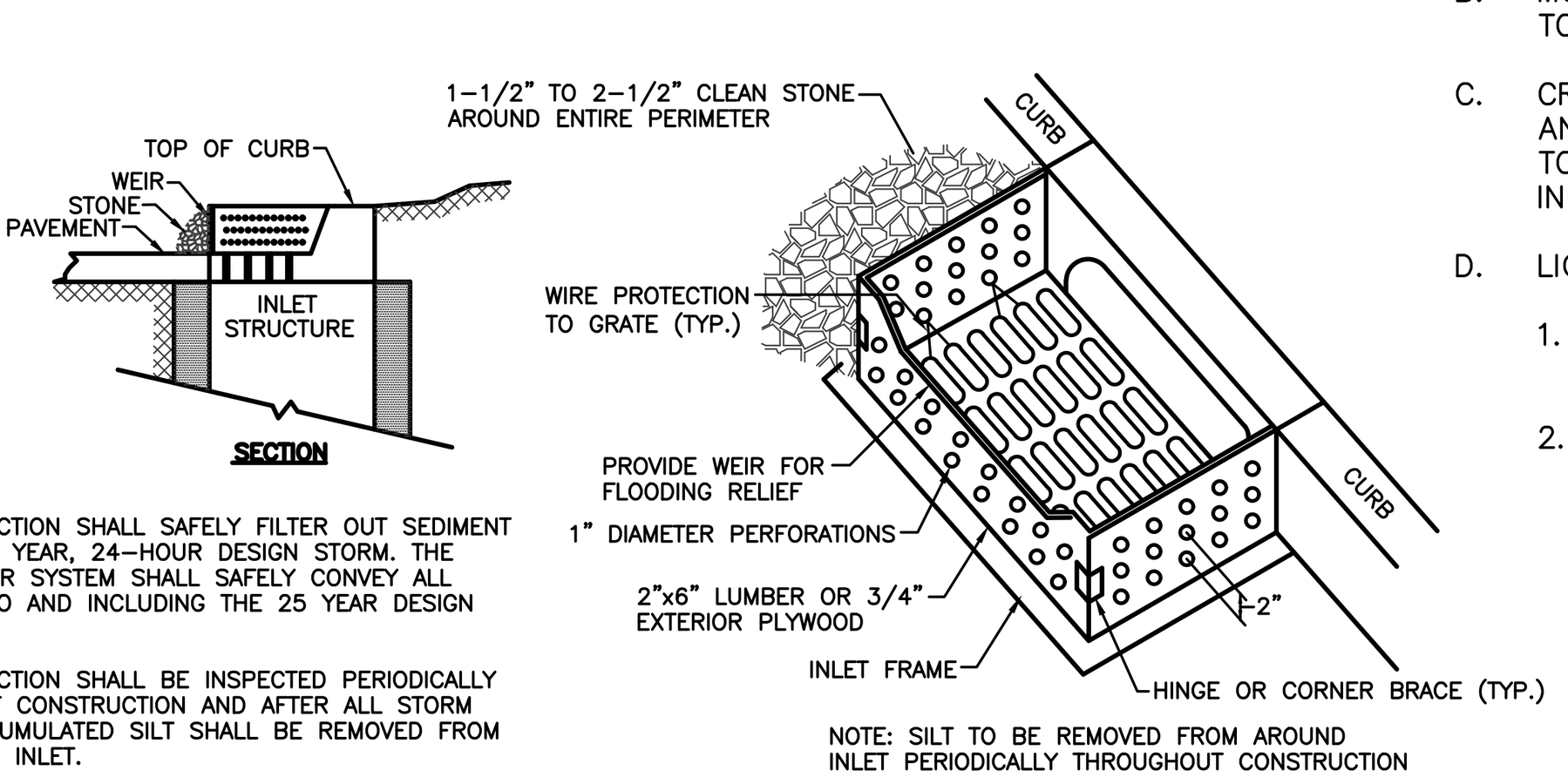
TYPICAL BIT. DRIVEWAY SECTION

N.T.S.



STOCKPILE CONTROL DETAIL

N.T.S.



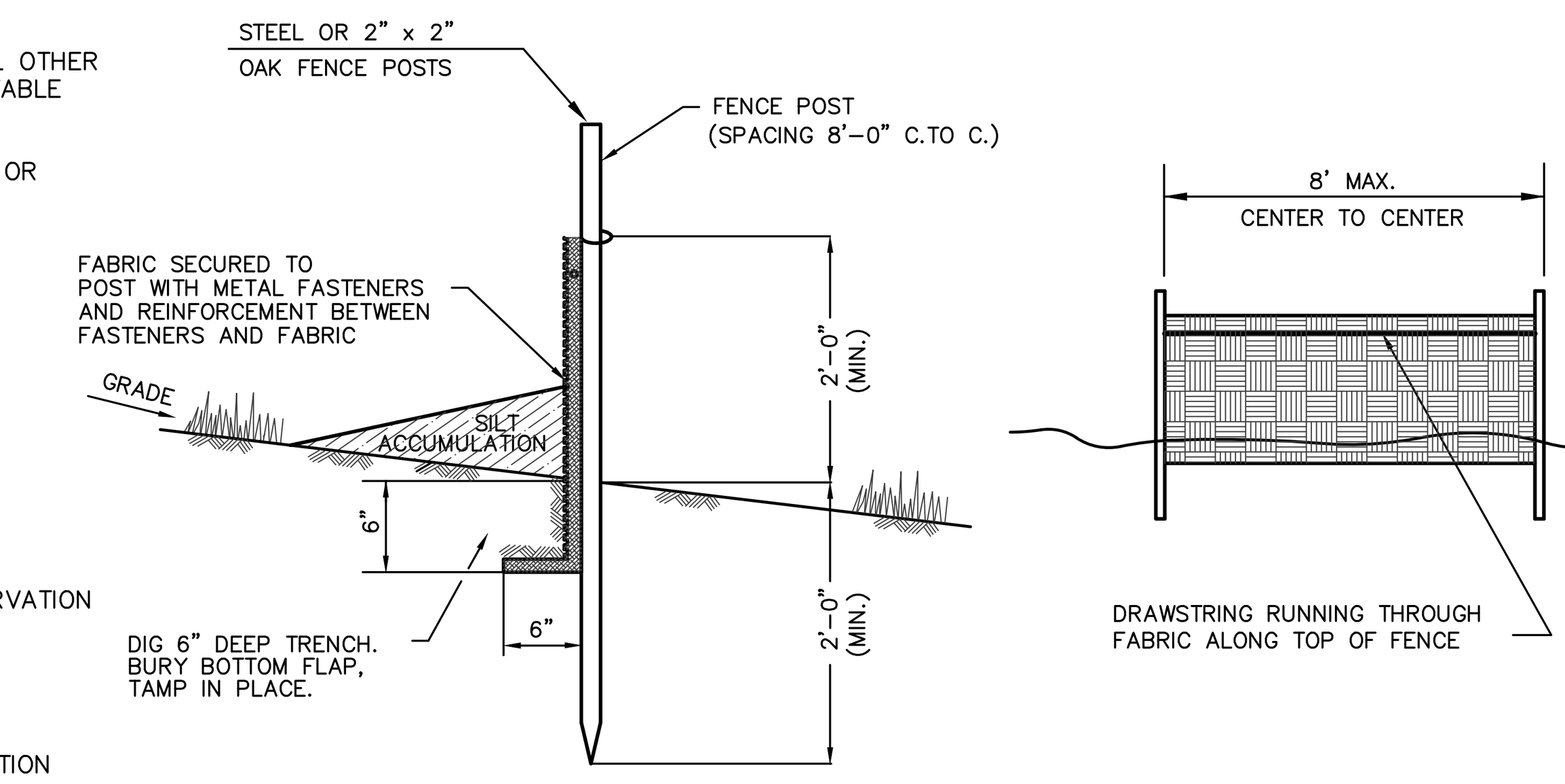
NOTES:

1. INLET PROTECTION SHALL SAFELY FILTER OUT SEDIMENT FROM THE 1 YEAR, 24-HOUR DESIGN STORM. THE STORM SEWER SYSTEM SHALL SAFELY CONVEY ALL FLOWS UP TO AND INCLUDING THE 25 YEAR DESIGN STORM.
2. INLET PROTECTION SHALL BE INSPECTED PERIODICALLY THROUGHOUT CONSTRUCTION AND AFTER ALL STORM EVENTS. ACCUMULATED SILT SHALL BE REMOVED FROM AROUND THE INLET.
3. FOR TYPE "A" AND "E" INLETS, PROVIDE SECOND WEIR PANEL ALONG FOURTH EDGE.

NOTE: SILT TO BE REMOVED FROM AROUND INLET PERIODICALLY THROUGHOUT CONSTRUCTION

INLET PROTECTION DETAIL

N.T.S.



NOTE: SYNTHETIC FILTER FABRIC SHALL BE FIRMLY ATTACHED TO UPHILL SIDE OF FENCE POSTS. OPEN AREA SHALL BE GREATER THAN 4% BUT LESS THAN 10% MEETING U.S. ARMY CORPS. OF ENGINEERS SPECIFICATION NO. CW02215 FOR STRENGTH.

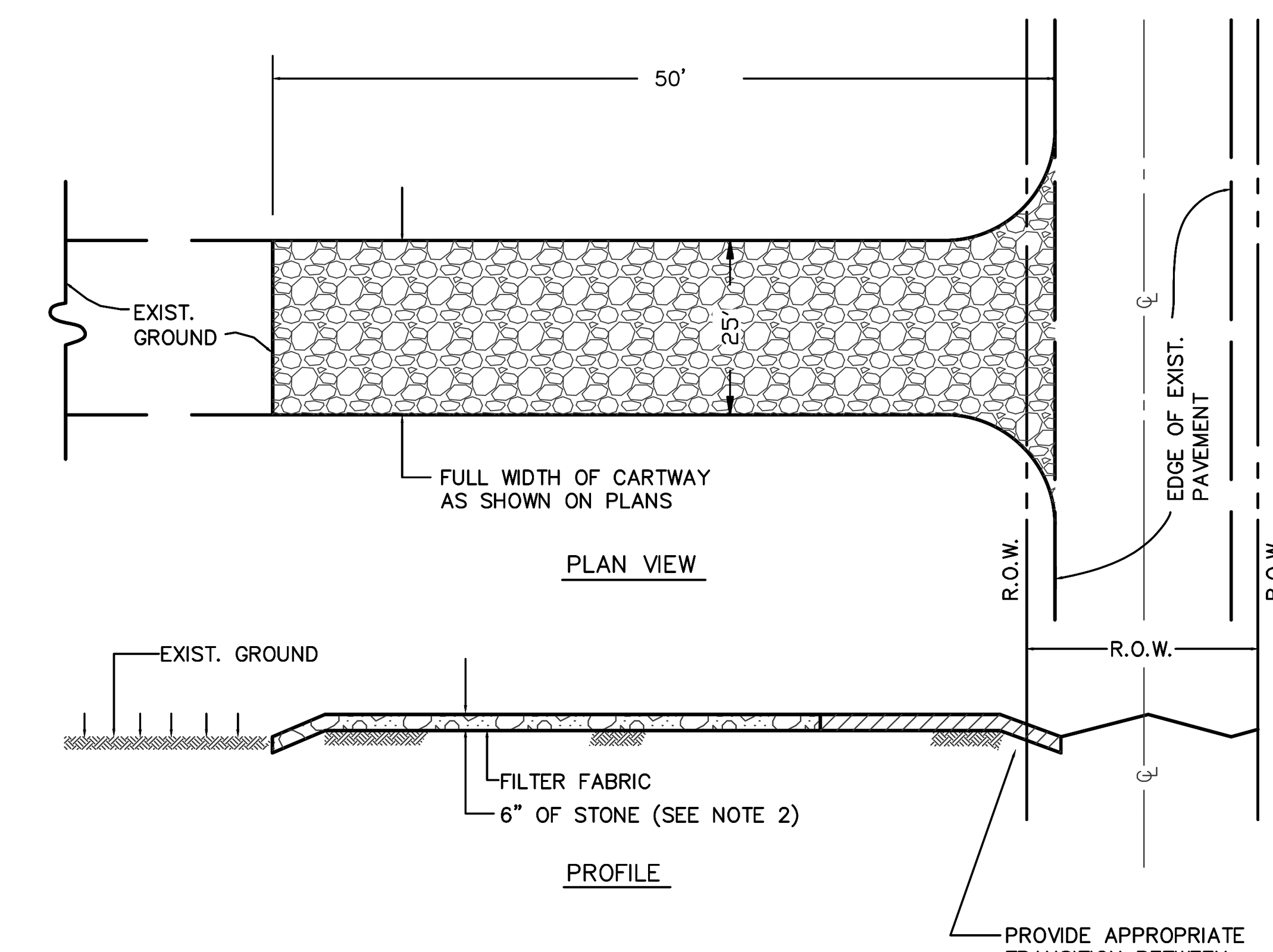
SILT FENCE DETAIL

N.T.S.

NOTE: SILT FENCE TO BE PLACED AT ALL DOWNSTREAM SLOPES TO BE DISTURBED.

MAINTENANCE NOTES:

1. SEDIMENT SHALL BE REMOVED FROM THE UPSTREAM FACE OF THE BARRIER WHEN IT HAS REACHED A DEPTH OF ½ THE BARRIER HEIGHT.
2. REPAIR OR REPLACE BARRIER (FABRIC, POSTS, BALES ETC.) WHEN DAMAGED.
3. BARRIERS SHALL BE INSPECTED DAILY FOR SIGNS OF DETERIORATION AND SEDIMENT REMOVAL.



NOTES:

1. PLACE STABILIZED CONSTRUCTION ENTRANCE AT LOCATION(S) AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
2. STONE SIZE SHALL BE ASTM C-33, SIZE NO.2 OR 3, CRUSHED STONE.
3. THE THICKNESS OF THE STAB. CONST. ENT. SHALL NOT BE LESS THAN 6".
4. THE WIDTH AT THE EXIST. PAVEMENT SHALL NOT BE LESS THAN THE FULL WIDTH OF POINTS OF INGRESS AND EGRESS.
5. THE STAB. CONST. ENT. SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE R.O.W./PAVEMENT. THIS REQUIRES PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT.
6. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO THE PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE

REV.	DATE	DESCRIPTION
1	11-1-25	GENERAL REVISIONS.

TWO RIVER ENGINEERING
■ Civil Engineers ■ Forensic Experts ■ Environmental Consultants
www.tworivereng.com
P.O. Box 155
Colts Neck, N.J. 07722
Tel: 732.866.0111
Fax: 732.866.4348

PROJECT NO.: 23112
DATE: AUGUST 11, 2025
DRAWING NO.: 23112PP
DRAWN BY: AJG
CLIENT: CINA
SCALE: AS SHOWN

NJDEP PERMIT PLAN
BUILDING PERMIT
PLOT PLAN
SOIL EROSION AND SEDIMENT CONTROL PLAN
16 HARBOR DRIVE
FOR
BLOCK 111
LOT 22
BOROUGH OF RUMSON
MONMOUTH COUNTY
NEW JERSEY

A.J. GARITO, JR.
11-01-2025
DATE
N.J. Professional Engineer
License No. 24GE03799700

APPLICATION UPDATE PACKAGE

ZB Application #26-8103, 16 Harbor Drive

August 27, 2026

- Copy of NJDEP Permit Plan/ Building Permit/ Plot Plan, Soil Erosion & Sediment Control Plan, prepared, signed by A.J. Garito, Jr. PE, dated August 11, 2025, last revision (3) August 12, 2026, consisting of six (6) sheets (#'s 1-5, 2A).

- Proposed Alteration / Ext. to a One Family Res. For Mr. & Mrs. Cina, prepared, signed and sealed by David J. Darcy, RA, dated June 15, 2023, last revision (20) August 5, 2026, consisting of two (2) plan sheets (A-001.03, SK-001.01) and two (2) sheets of photos (Photo-1.0, Photo 2.0) dated January 15, 2025, no revisions.

(718) 351-5475
(973) 361-2644

DAVID J. DARCY, RA
ARCHITECT
900 SOUTH AVENUE, SUITE 300, SI, NY 10314
49 CENTER ROAD, RANDOLPH, NJ 07869
darcyra@verizon.net

RECEIVED
AUG 12 2026
ZONING OFFICE

Ms. Marie DeSoucey
Land Use & Development Official
Borough Hall
80 East River Road
Rumson, NJ 07760

August 12, 2026

REF: Alteration to a One Family Detached Residence
16 Harbor Drive
Borough of Rumson, NJ

Dear Ms. DeSoucey,

Please find (12) sets of the following:

- Copy of the revised architectural drawings associated with the variances. Rev(20) 8/5/26

These revisions are being submitted, as we have significantly revised our variance requests pertaining to, setback from a navigable waterway, lot coverage, building coverage and floor area, as follows:

a) Reduced the new pool/spa approximately 30%
b) Significantly reduced the adjacent masonry patio
c) Reduced the roofed exterior kitchen area
d) Removed the exterior toilet
e) Removed the rear pergola
f) Removed the koi pond
g) Removed the cabana

We will present the revised rendering at the board meeting.

Please contact my office if there is any additional documentation required.

Thank you,

David J Darcy, AIA

GENERAL DATA

BLOCK	111
LOT	22 & 22.1
HOUSE #	16
TOWNSHIP	BOROUGH OF RUMSON
COUNTY	MONMOUTH

SCOPE OF WORK

PROPOSED ALTERATION / EXTENSION TO A DETACHED ONE FAMILY DWELLING.

PROPOSED EXTERIOR IMPROVEMENTS INCREASE IN BUILDING COVERAGE AND INCREASE IN IMPERVIOUS AREA, SUBJECT TO VARIANCE APPROVAL.

LEGEND

- < > PROPOSED GRADE
- ( ) EXISTING GRADE
- DENOTES DIRECTION OF PHOTOGRAPH
- STREET LINE
- ZONING LOT LINE
- REQUIRED YARD SETBACK
- PROPOSED DRIVEWAY, DECK AND WALKWAYS

ARCHITECTURAL DRAWING

A-001.00 - ARCHITECTURAL PLOT PLAN, ZONING INFORMATION & GENERAL NOTES

SITE PLAN NOTES

TOPOGRAPHIC SURVEY PREPARED BY KP2T PROFESSIONAL LAND SURVEYORS AND IS INCLUDED IN THE APPLICATION.

KP2T PROFESSIONAL LAND SURVEYORS TO PROVIDE TOPOGRAPHIC DESIGN & GRADING.

OWNER/BUILDER OF THE REFERENCED PROPERTY STATE THAT WORK DONE UNDER THIS APPLICATION WILL HAVE NO ADVERSE EFFECT ON ANY SURROUNDING PROPERTIES CONCERNING STORM WATER DRAINAGE MOREOVER, HE WILL BE RESPONSIBLE TO MAKE CERTAIN THAT WHILE THE WORK IS BEING DONE, THE SURROUNDING PROPERTIES WILL BE PROTECTED.

KOI POND CONSTRUCTION NOTE: REMOVAL OF CLORINE FILTRATION SYSTEM AND REPLACE WITH NATURAL FILTRATION SYSTEM. DEPTH OF KOI POND TO BE MAINTAINED AS A MINUMUM OF 4'-0", AND EQUIPED WITH UV LIGHT AND AERATION SYSTEM.

INGOUND POOL GENERAL SOIL GUIDELINES AND PREPARATION DETAILING TO BE PROVIDED BY POOL DESIGNER AND INSTALLER. NEW INFINITY EDGE POOL TO BEAR ON FIRM STABLE SOIL, AS INDICATED ON THE SOIL BORING LOG AND ANALYSIS FOR THIS SITE. EXCAVATION TO THIS DEPTH, IT IS ANTICIPATED, WILL REQUIRE DEWATERING AND STABILIZATION OF ADJACENT SOIL. THE BACKFILLING OF CLEAN SOIL AND A GRAVEL BASE FOR BEARING DISTRIBUTOIN OF THE POOL WILL REQUIRE LIFTS AS RECOMMENDED BY THE SOIL ENGINEER FOR PROPER COMPACTION.

CODE DATA

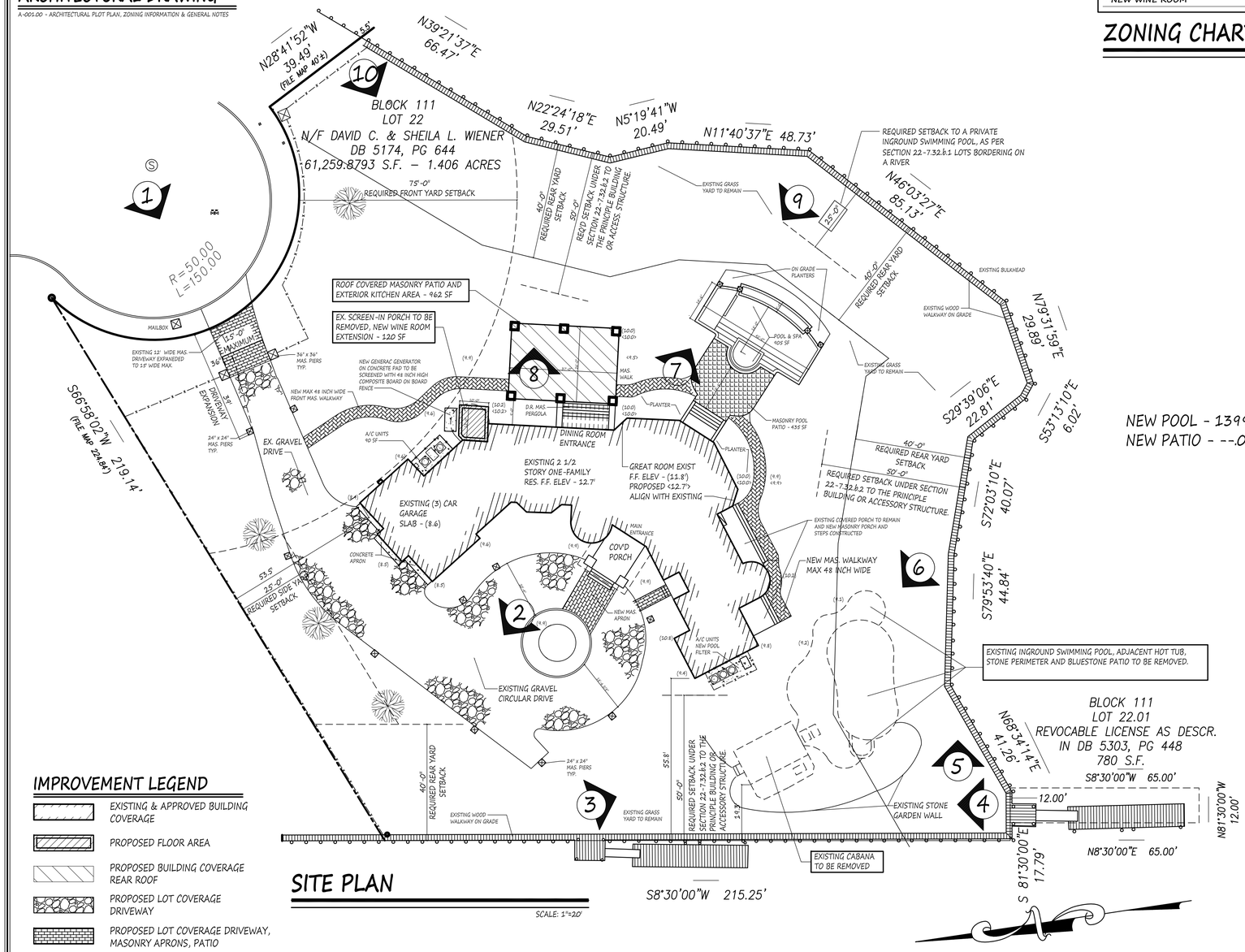
IDENTIFICAL OF PROJECT:
16 HARBOR DRIVE,
BOROUGH OF RUMSON, NJ

BUILDING / SITE CHARATERISTICS:
NUMBER OF STORIES - (2)
MAX LIVE LOAD - 40#
LOCATED WITHIN A FLOOD ZONE
NO CHANGE IN OCCUPANCY
CONSTRUCTION CLASS. - WOOD FRAME

APPLICABLE CONSTRUCTION CODES:
2021 INTERNATIONAL BUILDING CODE, NJ EDITION
2020 NATIONAL ELECTRIC CODE
2021 NATIONAL STANDARD PLUMBING CODE
2021 INTERNATIONAL MECHANICAL CODE
2021 INTERNATIONAL FUEL GAS CODE
2021 ENERGEY SUBCODE

ELEVATION CERTIFICATE INFORMATION
ELEVATION CERTIFICATE AS PROVIDED AND CERTIFIED BY KENNETH P. FRANK, PROFESSIONAL LAND SURVEYOR, KP2T PROFESSIONAL LAND SURVEYORS

MAP/PANEL - 34025C0184
SUFFIX - H
FIRM INDEX DATE - 06-15-2022
FIRM PANEL EFF. REVISED DATE - 06-15-2022
FLOOD ZONE - AE (EL 9)
BASE FLOOD ELEVATION(S) - NA



SITE PLAN

SCALE: 1"=20'

IMPROVEMENT LEGEND

- EXISTING & APPROVED BUILDING COVERAGE
- PROPOSED FLOOR AREA
- PROPOSED BUILDING COVERAGE REAR ROOF
- PROPOSED LOT COVERAGE DRIVEWAY
- PROPOSED LOT COVERAGE DRIVEWAY, MASONRY APRONS, PATIO
- EXCLUDED WALKWAYS PER SCHEDULE 5-1, NOTE 5.a
- EXCLUDED PATIO PER SCHEDULE 5-1, NOTE 5.b

MAXIMUM PERMITTED FLOOR AREA RATIO PER SCHEDULE 5-3A

FACTOR	UASABLE LOT AREA	F.A.R. PERMITTED	MAXIMUM PERMITTED FLOOR AREA		
USABLE LOT AREA OF LOT IF LESS THAN OR EQUAL TO 5,000 SF - USE 5,000 SF IF USABLE LOT AREA IS OVER 5,000 SF	5,000 SF	(X) 0.4	2,000 SF	-	-
USABLE LOT AREA OF LOT OVER 5,000 SF - USE 5,000 SF IF USABLE LOT AREA IS 10,000 SF OR MORE.	5,000 SF	(X) 0.3	1,500 SF	-	-
USABLE LOT AREA OF LOT OVER 10,000 SF - USE 60,000 SF IF USABLE LOT AREA IS 70,000 SF OR MORE.	51,259.87 SF	(X) 0.1	5,125.98 SF	-	-
ADD MAX. PERMITTED FA COLUMNS	-	-	8,625.98 SF	-	-
MAXIMUM PERMITTED FAR	-	-	.14	-	-
	PERMITTED / ALLOW.	EXISTING / APPROVED PER ZONING PERMIT - 4/26/2024	PROPOSED	COMPLIES	VARIANCE REQUIRED
FLOOR AREA SUMATION	8,626 SF	8,792.4 SF	8,912.40 SF (*120 SF)	NO	YES
* NEW WINE ROOM					

ZONING CHART

(718) 351-5475
(973) 361-2644
FAX (973) 361-5851
DAVID J. DARCY, RA
ARCHITECT
150 EAST AVENUE SUITE 150
LARCHMONT, NEW YORK 10538
N. Y. REGISTRATION No. 023831
N. J. REGISTRATION No. 17070
P. A. LICENSE No. RA406837

NO.	ISSUE / REVISION	DATE	BY
20	DESIGN CHANGES	8/5/25	DD
19	ZONING CHART REVISIONS	11/6/25	DD
18	REVISIONS TO PLAN - NOTES. DIM AND PERGOLA	10/20/2500	
17	BC AND LC REVISIONS	8/5/25	DD
16	REVISIONS BASED UPON ZO LETTER	7/15/25	DD
15	REVISIONS BASED UPON DENIAL LETTER	5/31/25	DD
14	VARIANCE CALC. REVISED	7/24/25	DD
13	SITE PHOTOS	7/15/25	DD
12	REVISED ZONING FOR VARIANCE	11/1/24	DD
11	REV. FOR MASONRY & COVERED PORCH	10/30/2400	
10	REVISED ZONING FOR VARIANCE	9/24/24	DD
9	ISSUE SET TO TOWN	9/24/24	DD
8	ISSUE FOR ZONING REVIEW	9/02/24	DD
7	ISSUE SET TO TOWN	5/5/24	DD
6	PERGOLA/POOL CHANGES	5/30/24	DD
5	GRADES AT REAR	5/5/24	DD
4	REVISIONS FOR ZONING REVIEW	8/24/23	DD
3	REVISIONS FOR ZONING REVIEW	8/14/23	DD
2	ISSUE SET TO TOWN ZONING REVIEW	7/24/23	DD
1	ISSUE SET TO TOWN	6/26/23	DD

PROJECT TITLE:
PROPOSED ALTERATION / EXT. TO A ONE FAMILY RES. FOR MR. & MRS. CINA
16 HARBOR DRIVE
BOROUGH OF RUMSON, NJ

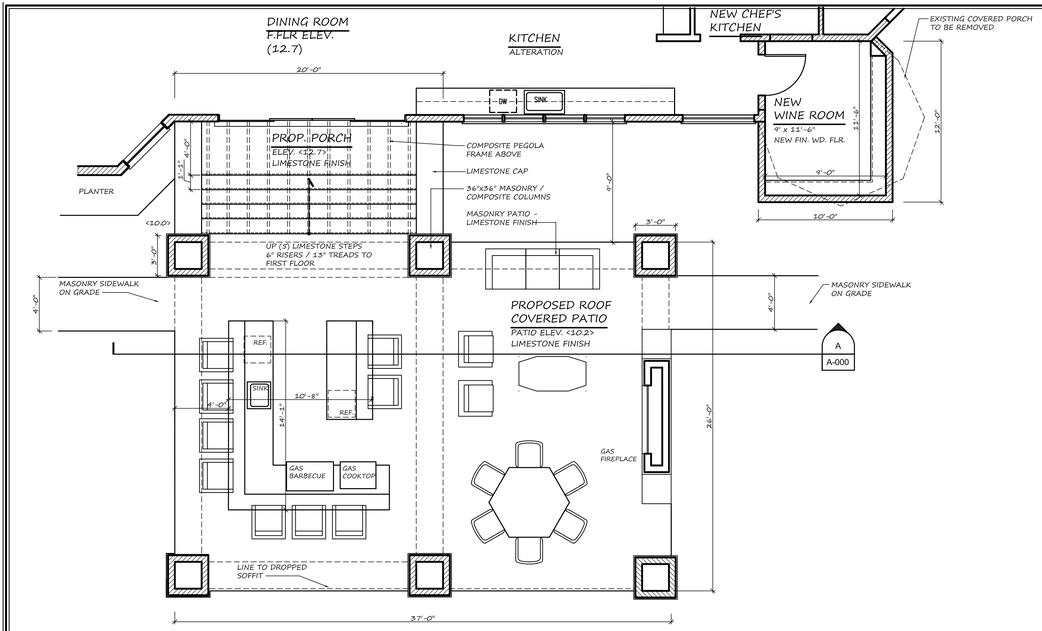
TOTAL AREA:

SHEET TITLE:
ARCHITECTURAL PLOT PLAN, ZONING INFORMATION & GENERAL NOTES

PROJECT NO: 23-800
DATE: 6/15/2023
SCALE: AS NOTED
DESIGNED BY: DD
REVIEWED BY: DD
APPROVED BY: DD

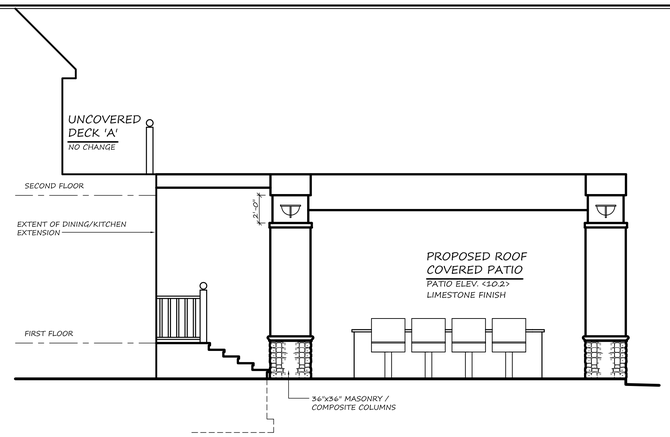
ARCHITECT SEAL

SHEET NO.
A-001.03



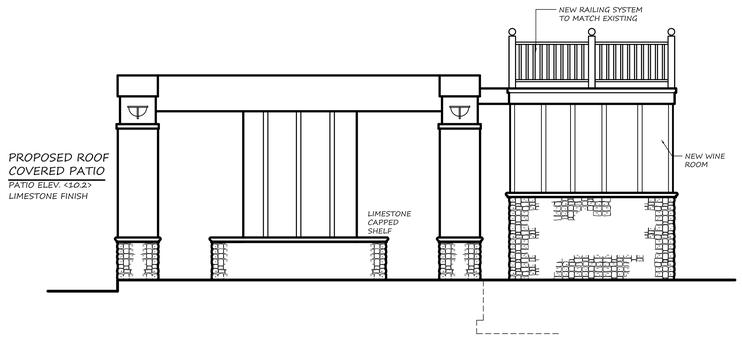
ROOF COVERED PATIO PLAN

SCALE: 3/16"=1'-0"



ROOF COVERED PATIO LEFT SIDE ELEV.

SCALE: 1/4"=1'-0"



ROOF COVERED PATIO SIDE ELEVATION

SCALE: 3/16"=1'-0"



ROOF COVERED PATIO SECTION A

SCALE: 3/16"=1'-0"



ROOF COVERED PATIO - REAR ELEVATION

SCALE: 3/16"=1'-0"

It is a violation of the law for any person, unless acting under the direction of a licensed architect, to alter an item in any way. If an item bearing the seal of an architect is altered, the altering architect shall affix to his item the seal and the notation "altered by" followed by his signature and the date of such alteration, and a specific description of the alteration.

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NO.	ISSUE / REVISION	DATE	BY
3	DESIGN REVISIONS	8/5/25	DD
2	PERGOLA REVISIONS	10/20/25	DD
1	REV. TO DESIGN, COVERED WAS PORCH	10/3/24	DD

PROJECT TITLE:
PROPOSED ALTERATION TO A ONE FAMILY RES. FOR MR. & MRS. CINA

16 HARBOR DRIVE
RUMSON, NJ

SHEET TITLE:
ARCHITECTURAL REAR MASONRY PROCH PLAN, SECTION & ELEVATIONS

PROJECT NO:	23-820
DATE:	1/24/2023
SCALE:	AS NOTED
DESIGNED BY:	DD
REVIEWED BY:	DD
APPROVED BY:	DD

ARCHITECT SEAL

SHEET NO.
SK-001.01
SHEET 1 OF 2



PHOTOGRAPH #1



PHOTOGRAPH #2



PHOTOGRAPH #3



PHOTOGRAPH #4



PHOTOGRAPH #5



PHOTOGRAPH #6



PHOTOGRAPH #7



PHOTOGRAPH #8

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NO.	ISSUE / REVISION	DATE	BY

PROJECT TITLE:
PROPOSED ALTERATION / EXT. TO A ONE FAMILY RES. FOR MR. & MRS. CINA
14 HARBOR DRIVE
BOROUGH OF RUMSON, NJ

TOTAL AREA:

SHEET TITLE:
SITE PHOTOGRAPHS FOR VARIANCE

PROJECT NO: 23-020
DATE: 1/15/2025
SCALE: AS NOTED
DESIGNED BY: DD
REVIEWED BY: DD
APPROVED BY: DD

ARCHITECT SEAL

SHEET NO.
PHOTO-1.0
SHEET 1 OF 2



PHOTOGRAPH #9



SOUTHEAST RENDERING



PHOTOGRAPH #10

SOUTHEAST RENDERING - R

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NO.	ISSUE / REVISION	DATE	BY

PROJECT TITLE:
PROPOSED ALTERATION / EXT. TO A ONE FAMILY RES.
FOR MR. & MRS. CINA
14 HARBOR DRIVE
BOROUGH OF RUMSON, NJ

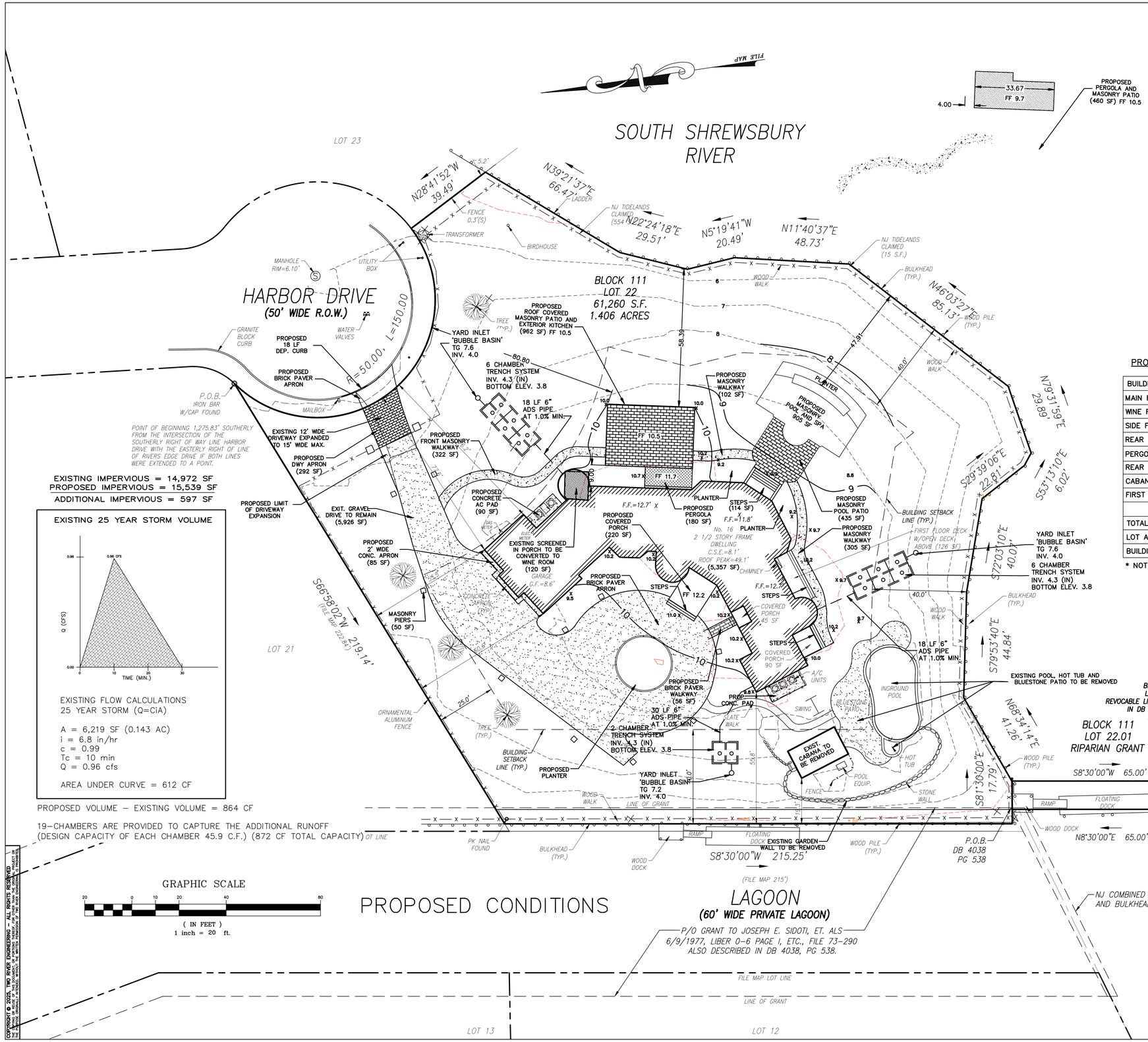
TOTAL AREA:

SHEET TITLE:
SITE PHOTOGRAPHS & RENDERINGS FOR VARIANCE

PROJECT NO: 23-820
DATE: 1/15/2025
SCALE: AS NOTED
DESIGNED BY: DD
REVIEWED BY: DD
APPROVED BY: DD

ARCHITECT SEAL

SHEET NO.
PHOTO-2.0
SHEET 2 OF 2





KEY MAP

PROPOSED LOT COVERAGE CALCULATION

DWELLING	5,357 SF
DRIVEWAY APRON	292 SF
DRIVEWAY	5,926 SF
MASONRY PIERS	50 SF
FRONT WALKWAY	56 SF*
FRONT PORCH	220 SF
FRONT PORCH STEPS	27 SF
FRONT MASONRY WALKWAY	322 SF*
FRONT AC PAD	90 SF
PERGOLA OFF DWELLING	180 SF
COVERED REAR MASONRY PATIO	962 SF
REAR MASONRY PERGOLA	460 SF
NEW WINE ROOM	120 SF
WALKWAY TO POOL PATIO	102 SF
STEPS TO POOL PATIO	114 SF
NEW POOL PATIO	435 SF
FIRST FLOOR OPEN DECK	126 SF
FIRST FLOOR OPEN DECK STEPS	44 SF
WALKWAY FROM OPEN DECK	305 SF
REAR COVERED PORCH	90 SF
REAR COVERED PORCH STEPS	21 SF
FRONT COVERED PORCH	45 SF
2' CONCRETE APRON	85 SF
CONC. EQUIP PAD	110 SF
IN-GROUND POOL AND SPA	905 SF
	16,444 SF
TOTAL	16,066 SF*
LOT AREA	61,260 SF
LOT AND BUILDING COVERAGE	26.23%

*EXCLUDED FROM LOT COVERAGE PER SCHEDULE 5-1 (5)

PROPOSED BUILDING COVERAGE CALCULATION

BUILDING	5,357 SF
MAIN FRONT PORCH	220 SF
WINE ROOM	120 SF
SIDE FRONT PORCH	45 SF
REAR COVERED PORCH	90 SF
PERGOLA OFF DWELLING	180 SF
REAR ROOF COVERED PATIO	962 SF
CABANA	287 SF
FIRST FLOOR OPEN DECK	126 SF
TOTAL	7,387 SF
LOT AREA	61,260 SF
BUILDING COVERAGE	12.06%

* NOT INCLUDED BECAUSE IT IS LESS THAN 30% OF FAR

EXISTING IMPERVIOUS = 14,972 SF
PROPOSED IMPERVIOUS = 15,539 SF
ADDITIONAL IMPERVIOUS = 597 SF

EXISTING 25 YEAR STORM VOLUME

EXISTING FLOW CALCULATIONS
25 YEAR STORM (Q=CiA)

A = 6,219 SF (0.143 AC)
i = 6.8 in/hr
c = 0.99
Tc = 10 min
Q = 0.96 cfs

AREA UNDER CURVE = 612 CF

PROPOSED VOLUME - EXISTING VOLUME = 864 CF

19-CHAMBERS ARE PROVIDED TO CAPTURE THE ADDITIONAL RUNOFF (DESIGN CAPACITY OF EACH CHAMBER 45.9 C.F.) (872 CF TOTAL CAPACITY)

GRAPHIC SCALE

20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

PROPOSED CONDITIONS

REV.	DATE	DESCRIPTION
3	08-12-26	GENERAL REVISIONS
2	12-9-25	GENERAL REVISIONS
1	11-1-25	GENERAL REVISIONS

TRE
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PROJECT NO.: 23112
DATE: AUGUST 11, 2025
DRAWING NO.: 23112PP
DRAWN BY: AJG
CLIENT: CINA
SCALE: AS SHOWN

NJDEP PERMIT PLAN
BUILDING PERMIT
PLOT PLAN
SOIL EROSION AND SEDIMENT CONTROL PLAN
16 HARBOR DRIVE
FOR
BLOCK 111
LOT 22
BOROUGH OF RUMSON
MONMOUTH COUNTY
NEW JERSEY

A.J. GARITO, JR.
08-12-2026
DATE
N.J. Professional Engineer
License No. 24GE03799700

SHEET NO. 2 OF 5

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SOUTH SHREWSBURY RIVER

FILE MAP

4.00 — 33.67

LOT 23

N28°41'52"W 39.49'

N39°21'37"E 66.47'

N22°24'18"E 29.51'

N5°19'41"W 20.49'

N11°40'37"E 48.73'

N46°03'27"E 85.13'

N79°31'59"E 29.89'

S29°39'06"E 22.81'

S53°13'10"E 6.02'

S72°03'10"E 40.01'

S79°53'40"E 44.84'

S81°30'00"E 17.79'

N68°34'14"E 41.26'

S8°30'00"W 65.00'

N81°30'00"W 12.00'

N8°30'00"E 65.00'

S8°30'00"W 215.25'

(FILE MAP 215')

S66°58'02"W 219.14'

(FILE MAP 222.84')

5.2'

FENCE 0.3'(S)

LADDER

NJ TIDELANDS CLAIMED (554 S.F.)

TRANSFORMER

BIRDHOUSE

NJ TIDELANDS CLAIMED (15 S.F.)

BULKHEAD (TYP.)

WOOD WALK

WOOD PILE (TYP.)

MANHOLE RIM=6.10'

UTILITY BOX

HARBOR DRIVE
(50' WIDE R.O.W.)

WATER VALVES

GRANITE BLOCK CURB

R=50.00', L=150.00

BLOCK 111
LOT 22
61,260 S.F.
1.406 ACRES

TREE (TYP.)

YARD INLET 'BUBBLE BASIN' TG 7.6 INV. 4.0

6 CHAMBER TRENCH SYSTEM INV. 4.3 (IN) BOTTOM ELEV. 3.8

18 LF 6" ADS PIPE AT 1.0% MIN.

P.O.B. IRON BAR W/CAP FOUND

MAILBOX

POINT OF BEGINNING 1,275.83' SOUTHERLY FROM THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE HARBOR DRIVE WITH THE EASTERLY RIGHT OF LINE OF RIVERS EDGE DRIVE IF BOTH LINES WERE EXTENDED TO A POINT.

PROPOSED 25' X 50' STABILIZED CONSTRUCTION ENTRANCE

LIMIT OF DISTURBANCE 0.9 ACRES

SILT FENCE

INLET PROTECTION

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

No. 16
2 1/2 STORY FRAME DWELLING
C.S.E.=8.1'
ROOF PEAK=49.1'

F.F.=12.7'

F.F.=11.8'

CHIMNEY

GAS METER

ELEC. METER

GARAGE G.F.=8.6'

CONCRETE APRON (TYP.)

COVERED PORCH 45 SF

COVERED PORCH 90 SF

A/C UNITS

INGROUND POOL

SWING

RETAINING WALL

SLATE WALK

HOT TUB

POOL EQUIP.

FENCE

STONE WALL

SOIL STOCKPILE

BUILDING SETBACK LINE (TYP.)

FIRST FLOOR DECK W/ BOTTOM DECK ROOF (126 SF)

30 LF 6" ADS PIPE AT 1.0% MIN.

2-CHAMBER TRENCH SYSTEM INV. 4.3 (IN) BOTTOM ELEV. 3.8

YARD INLET 'BUBBLE BASIN' TG 7.2 INV. 4.0

LINE OF GRANT

ORNAMENTAL ALUMINUM FENCE

TREE (TYP.)

25.0'

58.39'

47.91'

40.01'

53.6'

WOOD WALK

RAMP

FLOATING DOCK

WOOD DOCK

PK NAIL FOUND

BULKHEAD (TYP.)

WOOD DOCK

P.O.B. DB 4038 PG 538

BLOCK 111
LOT 22.01
REVOCABLE LICENSE AS DESCRIBED IN DB 5303, PG 448
780 S.F.

BLOCK 111
LOT 22.01
RIPARIAN GRANT

NJ PIERHEAD LINE

NJ COMBINED PIERHEAD AND BULKHEAD LINE

FILE MAP LOT LINE

LINE OF GRANT

LOT 21

LOT 13

LOT 12

LAGOON
(60' WIDE PRIVATE LAGOON)

P/O GRANT TO JOSEPH E. SIDOTI, ET. ALS
6/9/1977, LIBER O-6 PAGE 1, ETC., FILE 73-290
ALSO DESCRIBED IN DB 4038, PG 538.

SOIL COMPACTION MITIGATION NOT REQUIRED AS AREA IS LESS THAN 500 SF

SOIL EROSION & SEDIMENT CONTROL PLAN

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■ Civil Engineers
■ Forensic Experts
■ Environmental Consultants

PROJECT NO.: 23112
DATE: AUGUST 11, 2025
DRAWING NO.: 23112PP
DRAWN BY: SP
CLIENT: CINA
SCALE: AS SHOWN

SOIL EROSION AND SEDIMENT CONTROL PLAN

16 HARBOR DRIVE
FOR
BLOCK 111
LOT 22
BOROUGH OF RUMSON
MONMOUTH COUNTY
NEW JERSEY

A.U. GARITO, JR.
08-12-2026
DATE
N.J. Professional Engineer
License No. 24GE03799700

SHEET NO. 3 OF 5

TOPSOIL SCHEDULE

A. MATERIALS
1. TOPSOIL SHALL BE FRIABLE, LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES AND CONTAIN NO TOXIC SUBSTANCE OR ADVERSE CHEMICAL OR PHYSICAL CONDITION THAT MAY BE HARMFUL TO PLANT GROWTH. SOLUBLE SALTS SHALL NOT BE EXCESSIVE (CONDUCTIVITY LESS THAN 0.5 MILLIMHOS PER CENTIMETER. MORE THAN 0.5 MILLIMHOS MAY DESICATE SEEDLINGS AND ADVERSELY IMPACT GROWTH). TOPSOIL HAULED IN FROM OFFSITE SHALL HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.75 PERCENT. ORGANIC MATTER CONTENT MAY BE RAISED BY ADDITIVES.
2. TOPSOIL SUBSTITUTE IS A SOIL MATERIAL WHICH MAY HAVE BEEN AMENDED WITH SAND, SILT, CLAY, ORGANIC MATTER, FERTILIZER OR LIME AND HAS THE APPEARANCE OF TOPSOIL. TOPSOIL SUBSTITUTES MAY BE UTILIZED ON SITES WITH INSUFFICIENT TOPSOIL FOR ESTABLISHING PERMANENT VEGETATION. ALL TOPSOIL SUBSTITUTE MATERIALS SHALL MEET THE REQUIREMENTS OF TOPSOIL NOTED ABOVE. SOIL TESTS SHALL BE PERFORMED TO DETERMINE THE COMPONENTS OF SAND, SILT, CLAY, ORGANIC MATTER, SOLUBLE SALTS AND PH LEVEL.

B. STRIPPING AND STOCKPILING
1. FIELD EXPLORATION SHALL BE MADE TO DETERMINE WHETHER QUANTITY AND OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.
2. STRIPPING SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA.
3. LIME SHALL BE APPLIED BEFORE STRIPPING AT A RATE DETERMINED BY SOIL TESTS TO BRING THE SOIL PH TO APPROXIMATELY 6.5. IN LIEU OF SOIL TESTS, SEE THE LIME RATE GUIDE IN THE NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARD "SEEDBED PREPARATION FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION".
4. FULL-DEPTH TOPSOIL STRIPPING SHALL BE PERFORMED.
5. STOCKPILES OF TOPSOIL SHALL BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFFSITE ENVIRONMENTAL DAMAGE.
6. STOCKPILES SHALL BE VEGETATED IN ACCORDANCE WITH NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARD FOR "PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION" OR "TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION". WEEDS SHALL NOT BE ALLOWED TO GROW ON STOCKPILES.

C. SITE PREPARATION
1. GRADE AT THE ONSET OF THE OPTIMAL SEEDING PERIOD SO AS TO MINIMIZE THE DURATION AND AREA OF EXPOSURE OF DISTURBED SOIL TO EROSION. IMMEDIATELY PROCEED TO ESTABLISH VEGETATIVE COVER IN ACCORDANCE WITH THE SPECIFIED SEED MIXTURE. TIME IS OF THE ESSENCE.
2. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE. THE NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARD FOR "LAND GRADING" SHALL APPLY.
3. AS GUIDANCE FOR IDEAL CONDITIONS, SUBSOIL SHALL BE TESTED FOR LIME REQUIREMENT. LIMESTONE, IF NEEDED, SHALL BE APPLIED TO BRING SOIL TO A PH OF APPROXIMATELY 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
4. IMMEDIATELY PRIOR TO TOPSOILING, THE SURFACE SHALL BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS WILL HELP INSURE A GOOD BOND BETWEEN THE TOPSOIL AND SUBSOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.)
5. EMPLOY NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENTATION BASINS, AND WATERWAYS. SEE NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARDS AS APPLICABLE.

D. APPLY TOPSOIL
1. TOPSOIL SHALL BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE.
2. TOPSOIL SHALL BE APPLIED AT A UNIFORM DEPTH AS INIDCATED ON THE PLANS. SOILS WITH A PH OF 4.0 OR LESS CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A pH OF 5.0 OR MORE, IN ACCORDANCE WITH THE NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARD FOR "MANAGEMENT OF HIGH ACID PRODUCING SOIL".

NOTE: THE PLAN SHALL MEET THE STANDARDS FOR DEWATERING DEPICTED IN "THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY" AS SHOWN ON SHEET 14-1 TO 14-6.

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE FREEHOLD SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY.
2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RECERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
4. N.J.S.A. 4:24-39 ET.SEQ. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE DISTRICT DETERMINES THAT A PROJECT OR PORTION THEREOF IS IN FULL COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON WRITTEN REQUEST FROM THE APPLICANT, THE DISTRICT MAY ISSUE A REPORT OF COMPLIANCE WITH CONDITIONS ON A LOT BY LOT OR SECTION BY SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN IMPLIMENTED, INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK.
5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED FOR MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2-2½ TONS PER ACRE, ACCORDING TO THE STANDARD FOR STABILIZATION WITH MULCH ONLY.
6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. SOIL STOCKPILES, STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH ANCHOR, IN ACCORDANCE WITH STATE STANDARDS.
7. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF PRELIMINARY GRADING.
8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRE A STABILIZED CONSTRUCTION ACCESS CONSISTING OF 1" - 2" STONE FOR A MINIMUM LENGTH OF 10' EQUAL TO THE LOT ENTRANCE WIDTH. ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF.
9. ALL SOIL WASHED, DROPPED, SPILLED OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO THE PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY.
10. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.
11. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
12. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS / ACRE, (OR 450 LBS / 1000 SF OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12" OF SETTLED SOIL WITH A PH OF 5 OR MORE, OR 24" WHERE TREES OR SHRUBS ARE TO BE PLANTED.
13. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
14. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH STANDARD FOR DEWATERING.
15. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL.
16. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN. STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE WILL REQUIRE CERTIFICATION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN. CERTIFICATION OF A NEW SOIL EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000 SQUARE FEET IS DISTURBED.
17. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE #6.
18. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORM WATER OUTFALLS OR OFF SITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

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SEEDING SCHEDULE

1. TEMPORARY SEEDING SHALL CONSIST OF EITHER:

COOL SEASON GRASSES	RATES	SEEDING DATES	DEPTHS
PERENIAL RYEGRASS	1.0 LBS./S.F.	3/1-5/15 OR 8/15-10/1	0.5 IN.
SPRING OATS	2.0 LBS./S.F.	3/1-5/15 OR 8/15-10/1	1.0 IN.
WINTER BARLEY	2.2 LBS./S.F.	8/15-10/1	1.0 IN.
ANNUAL RYEGRASS	1.0 LBS./ S.F.	3/15-6/1 OR 8/1-9/15	0.5 IN.
WINTER CEREAL RYE	2.8 LBS./S.F.	8/1-11/15	1.0 IN.
WARM SEASON GRASSES			
PEARL MILLET	0.5 LBS./S.F.	5/15-8/15	1.0 IN.
MILLET (GERMAN OR HUNGARIAN)	0.7 LBS./S.F.	5/15-8/15	1.0 IN.

2. SITE PREPARATION (PERMANENT)

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.

B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING .

C. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.

D. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

SITE PREPARATION (TEMPORARY)

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING, PG. 19-1.

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

3. SEEDBED PREPARATION (PERMANENT)

A. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSIONS OFFICES (HTTP://NJAES.RUTGERS.EDU/COUNTY/). FERTILIZER SHALL BE APPLIED AT A RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING.

B. WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICLE TO A DEPTH OF 4 INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

C. HIGH ACID PRODUCING SOILS. SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED REPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.

4. SEEDBED PREPARATION (TEMPORARY)

A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES.

B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA BE RETILLED IN ACCORDANCE WITH THE ABOVE.

D. SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, PG. 1-1.

5. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, LUMPS OR ANY OTHER UNSUITABLE MATERIAL.

6. PERMANENT GROUND COVER OF SODDING OR SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE OR APPROVED EQUAL:

SEEDING	RATES
TALL FESCUE	6.0 LBS./1,000 S.F.
KENTUCKY BLUEGRASS (BLEND)	0.5 LBS./1,000 S.F.
PERENIAL RYEGRASS (BLEND)	0.5 LBS./1,000 S.F.

OPTIMAL SEEDING DATES: 8/15-10/15
ACCEPTABLE SEEDING DATES: 3/1-4/30 AND 5/1-8/14

SEED TO A DEPTH OF 0.5 IN.

7. THE SEEDING SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER OR LIGHT DRAG.

8. TACKING SHALL BE PERFORMED AS PER THE CURRENT STANDARDS OF THE FREEHOLD SOIL CONSERVATION DISTRICT. ASPHALT TACKIFIERS ARE NOT ACCEPTABLE.

9. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

A. STRAW OR HAY. UNNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

APPLICATION. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRIS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
2. MULCH NETTINGS. STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
3. CRIMPER (MULCH ANCHORING TOOL). A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
4. LIQUID MULCH-BINDERS. -MAY BE USED TO ANCHOR HAY OR STRAW MULCH.

A. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.

B. USE ONE OF THE FOLLOWING:

(1) ORGANIC AND VEGETABLE BASED BINDERS -NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.

(2) SYNTHETIC BINDERS -HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

NOTE: ALL NAMES GIVE ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A COMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

STANDARD FOR STABILIZATION WITH MULCH ONLY

1. SITE PREPARATION

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING.

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11-42.

2. PROTECTIVE MATERIALS

A. UNROTEED SMALL-GRAIN STRAW AT 2.0 TO 2.5 TONS PER ACRE IS SPREAD UNIFORMLY AT 90-115 POUNDS PER 1,000 S.F. AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN. THE APPROVED RATED ABOVE HAVE BEEN MET WHEN THE MULCH COVERS THE GROUND COMPLETELY UPON VISUAL INSPECTION, I.E. THE SOIL CANNOT BE SEEN BELOW THE MULCH.

C. SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE USED UNDER SUITABLE CONDITIONS AND IN QUANTITIES AS RECOMMENDED BY THE MANUFACTURER.

D. WOOD-FIBER OR PAPER-FIBERMULCH AT THE RATE OF 1,500 POUNDS PER ACRE (OR ACCORDING TO THE MANUFACTURER'S REQUIREMENTS) MAY BE APPLIED BY A HYDROSEEDER.

E. MULCH NETTING, SUCH AS PAPER JUTE, EXCELSIOR, COTTON, OR PLASTIC, MAY BE USED.

F. WOODCHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED. WOODCHIPS WILL NOT BE USED ON AREAS WHERE FLOWING WATER COULD WASH THEM INTO AN INLET AND PLUG IT.

G. GRAVEL, CRUSHED STONE, OR SLAG AT THE RATE OF 9 CUBIC YARDS PER 1,000 S.F. APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 3 INCHES MAY BE USED. SIZE 2 OR 3 (ASTM C-33) IS RECOMMENDED.

3. MULCH ANCHORING

MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OR THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA AND STEEPNESS OF SLOPES.

A. PEG AND TWINE - DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2-3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISSCROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.

B. MULCH NETTINGS - STAPLE PAPER, COTTON, OR PLASTIC NETTINGS OVER MULCH. USE DEGRADABLE NETTING IN AREAS TO BE MOWED. NETTING IS USUALLY AVAILABLE IN ROLLS 4 FEET WIDE AND UP TO 300 FEET LONG.

C. CRIMPER MULCH ANCHORING COULTER TOOL - A TRACTOR DRAWN IMPLEMENT ESPECIALLY DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOLID SURFACE. THIS PRACTICE AFFORDS MAXIMUM EROSION CONTROL, BUT ITS USE IS LIMITED TO THOSE SLOPES UPON WHICH THE TRACTOR CAN OPERATE SAFELY. SOIL PENETRATION SHOULD BE ABOUT 3 TO 4 INCHES. ON SLOPING LAND, THE OPERATION SHOULD BE ON THE CONTOUR.

D. LIQUID MULCH-BINDERS

1. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE.
2. USE ONE OF THE FOLLOWING:

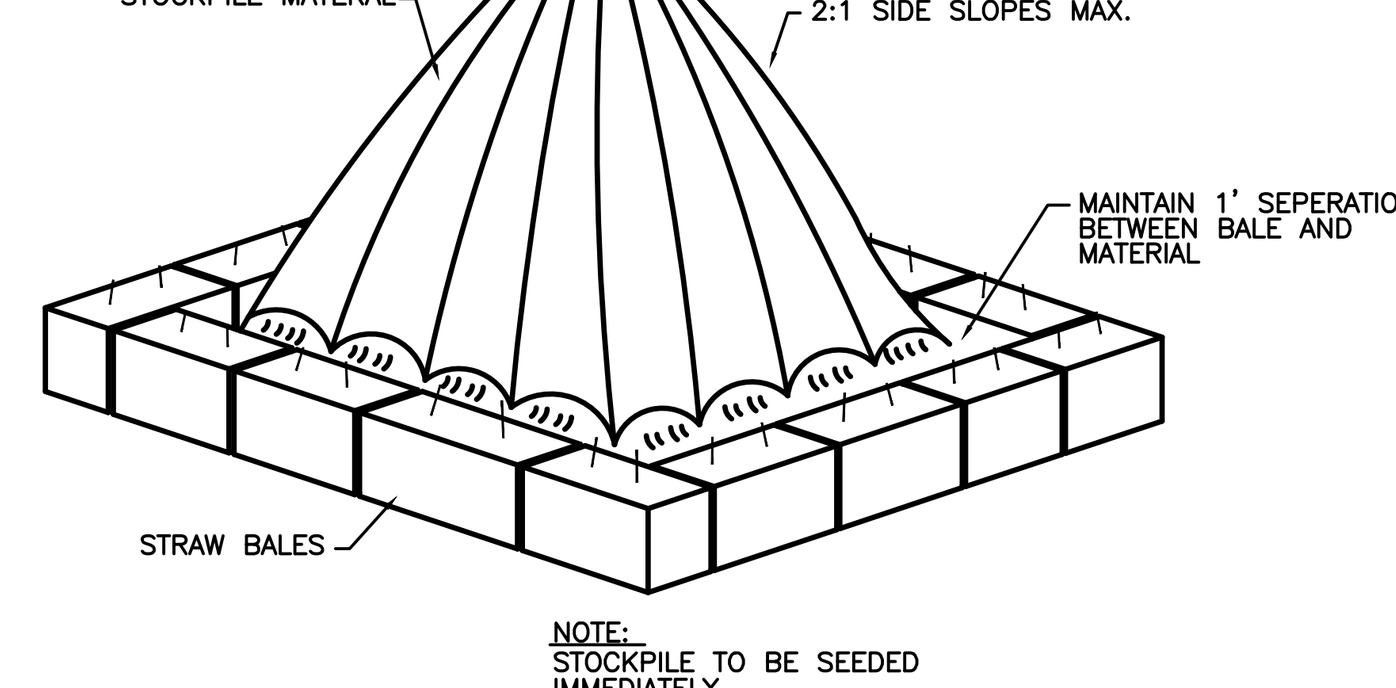
a. ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS THAT MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. VEGETABLE BASED GELS SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER.

b. SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

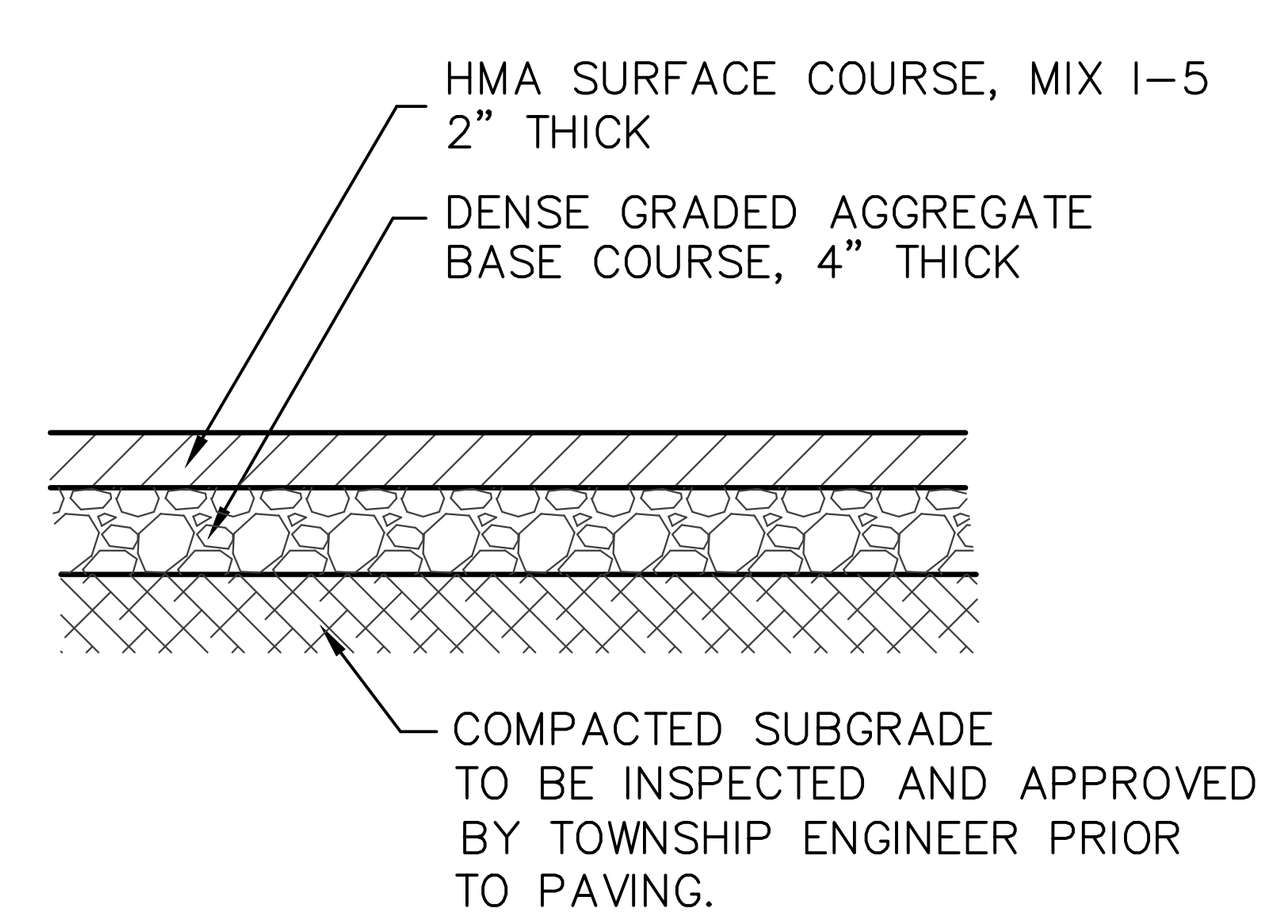
NOTE: MULCHING IS REQUIRED ON ALL SEEDING

CONSTRUCTION SCHEDULE AND PROCEDURE FOR IMPLEMENTATION OF SOIL EROSION AND SEDIMENT CONTROL MEASURES

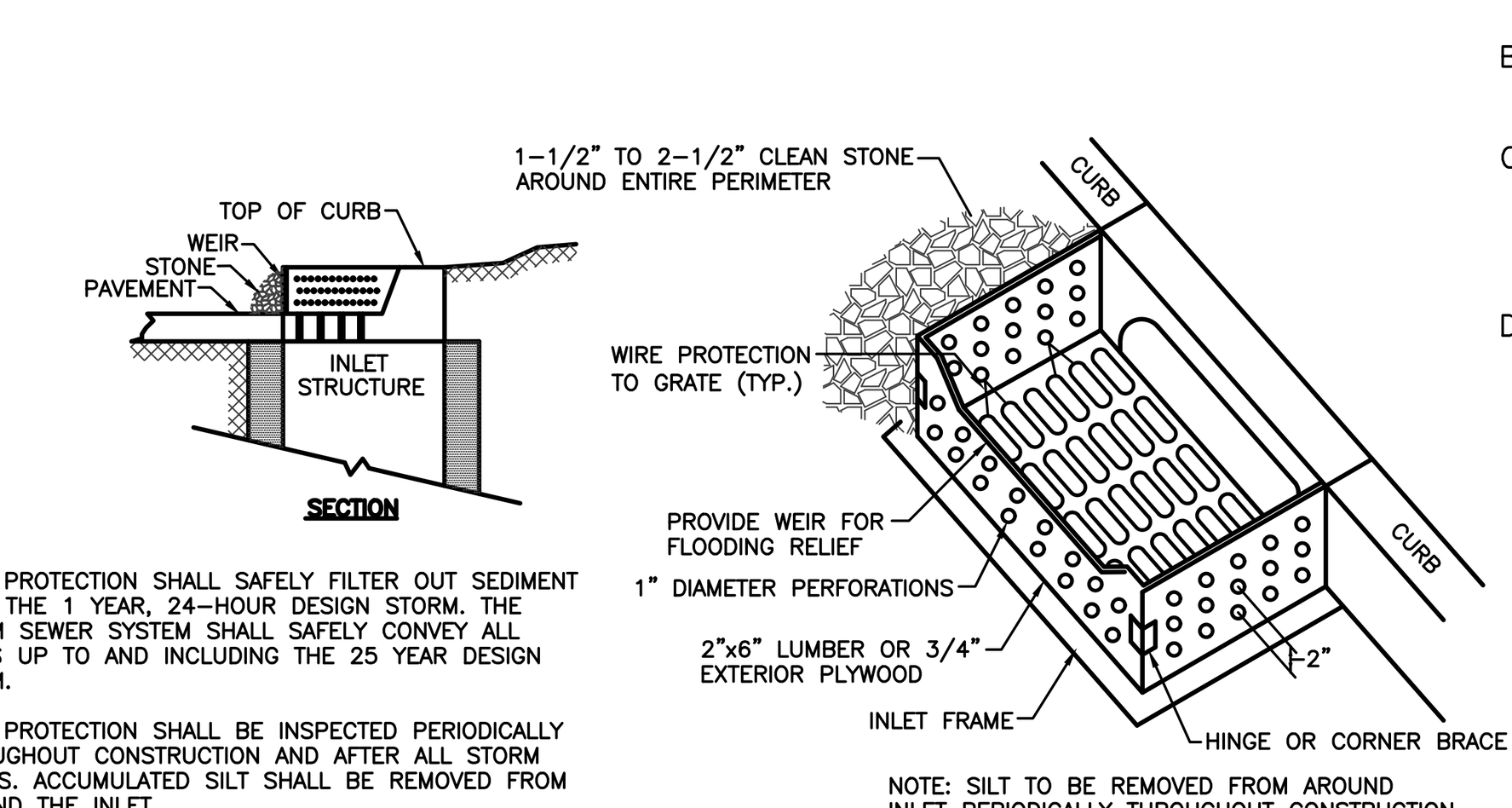
1. INSTALL SILT FENCE AND INLET PROTECTION.	1 DAY
2. PROVIDE TEMPORARY ACCESS PROTECTION (CONSTRUCTION ENTRANCE).	1 DAY
3. CLEAR ALLOWABLE VEGETATION.	2 DAYS
5. STRIP AND STOCKPILE TOPSOIL. APPLY TEMPORARY STABILIZATION.	2 DAYS
6. ESTABLISH ROUGH GRADES AS NECESSARY TO CONSTRUCT IMPROVEMENTS.	2 DAYS
7. CONSTRUCT IMPROVEMENTS.	3 MONTHS
8. CONSTRUCT FINE GRADING TO FINISHED GRADES, RE-SPREAD TOPSOIL AND ESTABLISH PERMANENT VEGETATIVE COVER ON THE LOT.	1 WEEK
9. REMOVE ACCESS PROTECTION, INLET PROTECTION, AND SILT FENCE AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED.	1 DAY



STOCKPILE CONTROL DETAIL
N.T.S.

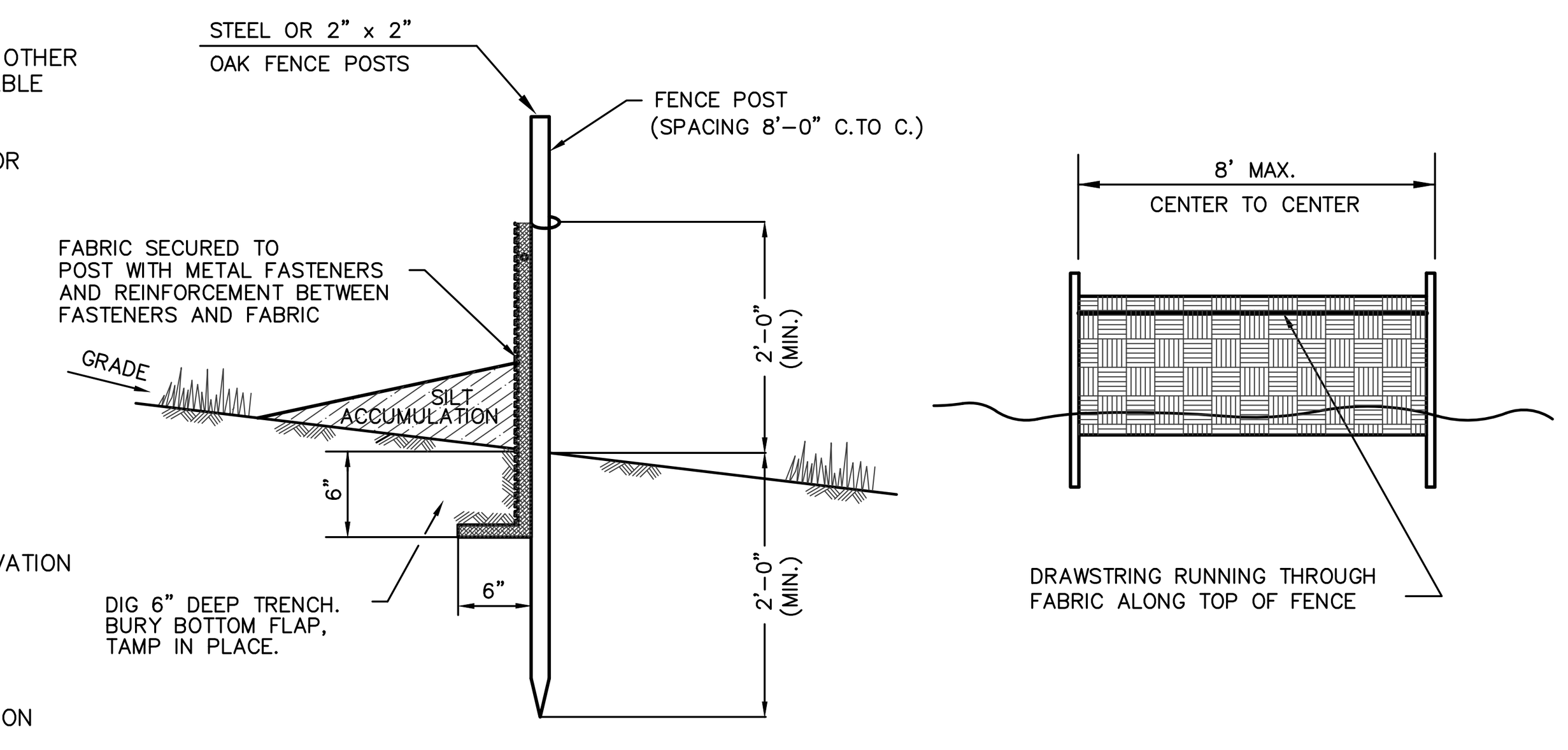


TYPICAL BIT. DRIVEWAY SECTION
N.T.S.



NOTES:
1. INLET PROTECTION SHALL SAFELY FILTER OUT SEDIMENT FROM THE 1 YEAR, 24-HOUR DESIGN STORM. THE STORM SEWER SYSTEM SHALL SAFELY CONVEY ALL FLOWS UP TO AND INCLUDING THE 25 YEAR DESIGN STORM.
2. INLET PROTECTION SHALL BE INSPECTED PERIODICALLY THROUGHOUT CONSTRUCTION AND AFTER ALL STORM EVENTS. ACCUMULATED SILT SHALL BE REMOVED FROM AROUND THE INLET.
3. FOR TYPE "A" AND "E" INLETS, PROVIDE SECOND WEIR PANEL ALONG FOURTH EDGE.

INLET PROTECTION DETAIL
N.T.S.

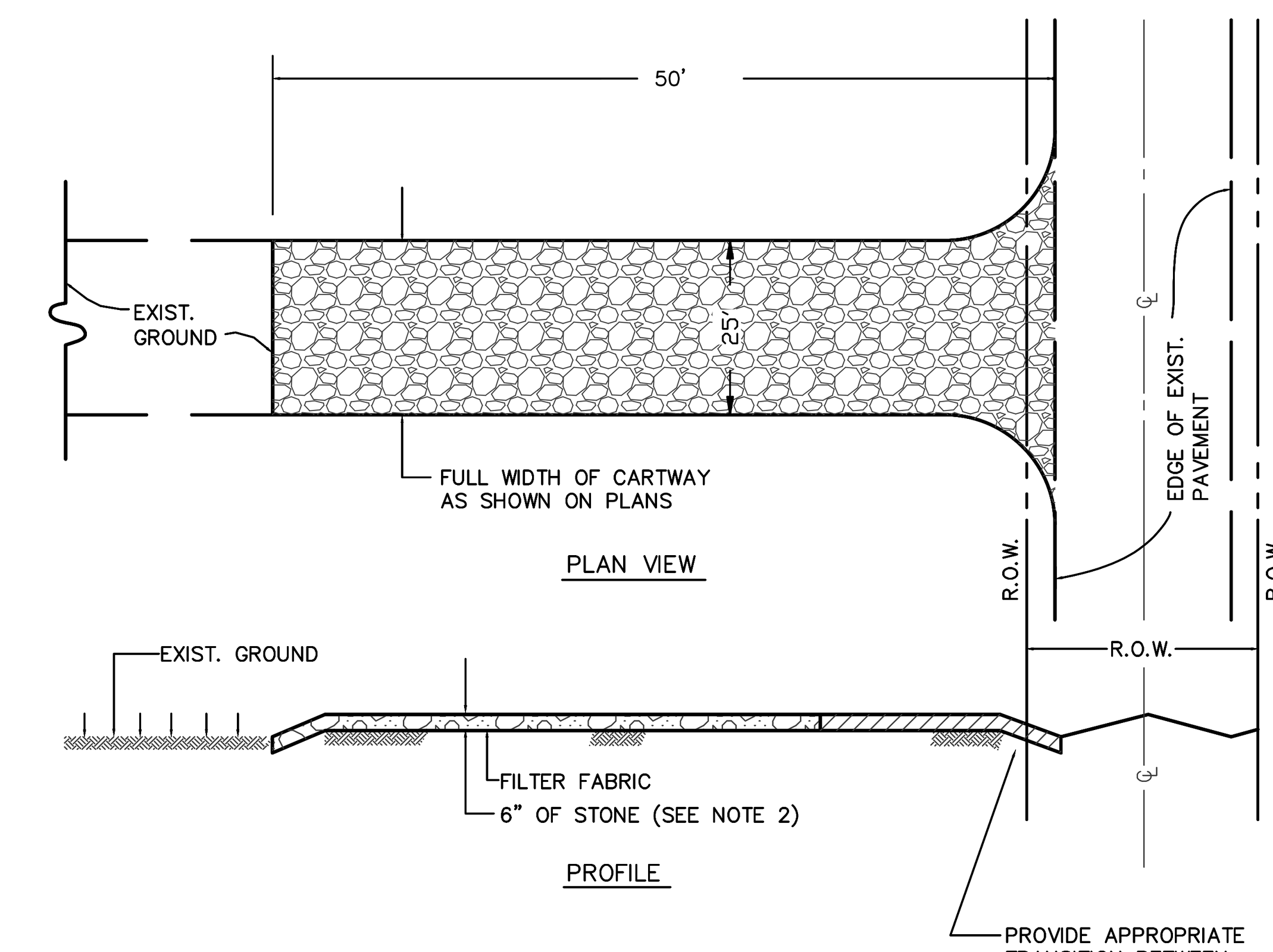


NOTE: SYNTHETIC FILTER FABRIC SHALL BE FIRMLY ATTACHED TO UPHILL SIDE OF FENCE POSTS. OPEN AREA SHALL BE GREATER THAN 4% BUT LESS THAN 10% MEETING U.S. ARMY CORPS. OF ENGINEERS SPECIFICATION NO. CW02215 FOR STRENGTH.

SILT FENCE DETAIL
N.T.S.

NOTE: SILT FENCE TO BE PLACED AT ALL DOWNSTREAM SLOPES TO BE DISTURBED.

MAINTENANCE NOTES:
1. SEDIMENT SHALL BE REMOVED FROM THE UPSTREAM FACE OF THE BARRIER WHEN IT HAS REACHED A DEPTH OF ½ THE BARRIER HEIGHT.
2. REPAIR OR REPLACE BARRIER (FABRIC, POSTS, BALES ETC.) WHEN DAMAGED.
3. BARRIERS SHALL BE INSPECTED DAILY FOR SIGNS OF DETERIORATION AND SEDIMENT REMOVAL.



NOTES:
1. PLACE STABILIZED CONSTRUCTION ENTRANCE AT LOCATION(S) AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
2. STONE SIZE SHALL BE ASTM C-33, SIZE NO.2 OR 3, CRUSHED STONE.
3. THE THICKNESS OF THE STAB. CONST. ENT. SHALL NOT BE LESS THAN 6".
4. THE WIDTH AT THE EXIST. PAVEMENT SHALL NOT BE LESS THAN THE FULL WIDTH OF POINTS OF INGRESS AND EGRESS.
5. THE STAB. CONST. ENT. SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE R.O.W./PAVEMENT. THIS REQUIRES PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT.
6. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO THE PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE

REV.	DATE	DESCRIPTION
3	08-12-26	GENERAL REVISIONS
2	12-9-25	GENERAL REVISIONS
1	11-1-25	GENERAL REVISIONS.

TRE
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■ Forensic Experts
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PROJECT NO.: 23112
DATE: AUGUST 11, 2025
DRAWING NO.: 23112PP
DRAWN BY: AJG
CLIENT: CINA
SCALE: AS SHOWN

NJDEP PERMIT PLAN
BUILDING PERMIT
PLOT PLAN
SOIL EROSION AND SEDIMENT CONTROL PLAN
16 HARBOR DRIVE
FOR
BLOCK 111
LOT 22
BOROUGH OF RUMSON
MONMOUTH COUNTY
NEW JERSEY

A.J. GARITO, JR.
08-12-2026
DATE
N.J. Professional Engineer
License No. 24GE03799700

STANDARD
FOR
MANAGEMENT OF HIGH ACID-PRODUCING SOILS

Definition

High acid-producing soils are soils with a pH of 4.0 or less or contain iron sulfide.

Purpose

To prevent or limit exposure area, time, and spreading by equipment or rainfall on- and off-site and to minimize erosion, sedimentation and acid leachate-related damages. High acid-producing soil may be exposed during excavation and land grading activities, or may be introduced in dredged sediment. Soils and sediment containing iron sulfide, characterized by pyrite or marcasite nuggets or greensands, are chemically oxidized when exposed to air, producing sulfuric acid and result in soil pH levels falling to pH 4.0 and lower. Most vegetation is incapable of growth at this pH level. Adjacent land and receiving waters will be negatively impacted by the acid leachate. Calcium-containing materials such as sidewalks, culverts and other structures and some metallic materials are also susceptible to degradation. Agricultural limestone materials applied at rates of 8 tons per acre have resulted in only a temporary buffering effect, and "liming-only" is therefore not considered an acceptable mitigation practice.

Water Quality Enhancement

Protects onsite soils and offsite streams and lakes from sulfuric acid leachate that creates soil pH conditions unsuitable for growth of vegetation.

Where Applicable

This practice is applicable to any high acid-producing soil materials. Such materials have been found in the Coastal Plain areas of Burlington, Camden, Cumberland, Gloucester, Mercer, Middlesex, Monmouth, Ocean, Salem and Somerset Counties.

Planning Criteria

Early recognition and burial, removal or disposal of high acid-producing soils is essential for limiting the amount of acidic material produced.
Review a surface geology map for the proposed site to investigate the presence of geologic formations which commonly contain high acid-producing deposits. The geologic formations are as follows:

Cheesequake	Manasquan	Red Bank, Sandy Hook Member
Englishtown Sand	Marshalltown	Shark River
Hornerstown	Merchantville	Tinton
Kirkwood	Navesink	Wenonah
Magothy	Raritan	Woodbury Clay

Figure 1-1 shows areas where these deposits may be present.

Contact the local Soil Conservation District to determine the historical presence of high acid-producing soils in the vicinity of the proposed development site.

High acid-producing soils may be present in undisturbed soils at varying depths, including near the soil surface to excavations or deep disturbances. Its presence on a site may be significant or limited in the soil profile. High acid-

producing soils are commonly black, dark brown, gray or greenish with silvery pyrite or marcasite nuggets or flakes. Alternatively, sandy soils or reddish, yellowish or light to medium brown soil materials are usually free of high acid-producing deposits.

Methods and Materials

1. Limit the excavation area and exposure time when high acid-producing soils are encountered.

2. Topsoil stripped from the site shall be stored separately from temporarily stockpiled high acid-producing soils.

3. Stockpiles of high acid-producing soil should be located on level land to minimize its movement, especially when this material has a high clay content.

4. Temporarily stockpiled high acid-producing soil material to be stored more than 48 hours should be covered with properly anchored, heavy grade sheets of polyethylene where possible. If not possible, stockpiles shall be covered with a minimum of 3 to 6 inches of wood chips to minimize erosion of the stockpile. Silt fence shall be installed at the toe of the slope to contain movement of the stockpiled material. Topsoil shall not be applied to the stockpiles to prevent topsoil contamination with high acid-producing soil.

5. High acid-producing soils with a pH of 4.0 or less or containing iron sulfide (including borrow from cuts or dredged sediment) shall be ultimately placed or buried with limestone applied at the rate of 10 tons per acre (or 450 pounds per 1,000 square feet of surface area) and covered with a minimum of 12 inches of settled soil with a pH of 5.0 or more except as follows:
   a. Areas where trees or shrubs are to be planted shall be covered with a minimum of 24 inches of soil with a pH or 5 or more.
   b. Disposal areas shall not be located within 24 inches of any surface of a slope or bank, such as berms, stream banks, ditches, and others, to prevent potential lateral leaching damages.

6. Equipment used for movement of high acid-producing soils should be cleaned at the end of each day to prevent spreading of high acid-producing soil materials to other parts of the site, into streams or stormwater conveyances, and to protect machinery from accelerated rusting.

7. Non-vegetative erosion control practices (stone tracking pads, strategically placed limestone check dam, sediment barrier, wood chips) should be installed to limit the movement of high acid-producing soils from, around, or off the site.

8. Following burial or removal of high acid-producing soil, topsoiling and seeding of the site (see Temporary Vegetative Cover for Soil Stabilization, Permanent Vegetative Cover for Soil Stabilization, and Topsoiling), **monitoring must continue for a minimum of 6 months** to ensure there is adequate stabilization and that no high acid-producing soil problems emerge. If problems still exist, the affected area must be treated as indicated above to correct the problem.

STANDARD
FOR
DUST CONTROL

Definition

The control of dust on construction sites and roads.

Purpose

To prevent blowing and movement of dust from exposed soil surfaces, reduced on-site and off-site damage and health hazards and improve traffic safety.

Condition Where Practice Applies

This practice is applicable to areas subject to dust blowing and movement where on-site and off-site damage is likely without treatment. Consult with local municipal ordinances on any restrictions.

Water Quality Enhancement

Sediments deposited as "dust" are often fine colloidal material which is extremely difficult to remove from water once it becomes suspended. Use of this standard will help to control the generation of dust from construction sites and subsequent blowing and deposition into local surface water resources.

Planning Criteria

The following methods should be considered for controlling dust:

Mulches - See Standard of Stabilization with Mulches Only, pg. 5-1

Vegetative Cover - See Standard for: Temporary Vegetative Cover, pg. 7-1, Permanent Vegetative Cover for Soil Stabilization pg. 4-1 and Permanent Stabilization with Sod, pg. 6-1

Spray-On Adhesives - On mineral soils (not effective on muck soils). Keep traffic off these areas.

Table 16-1 Dust Control Materials

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
Anionic asphalt emulsion	7:1	Coarse Spray	1200
Latex emulsion	12.5:1	Fine Spray	235
Resin in water	4:1	Fine Spray	300
Polyacrylamide (PAM) - spray on Polyacrylamide (PAM) - dry spread	Apply according to manufacturer's instructions. May also be used as an additive to sediment basins to flocculate and precipitate suspended colloids. See Sediment Basin standard, p. 26-1		
Acidulated Soy Bean Soap Stick	None	Coarse Spray	1200

Tillage - To roughen surface and bring clods to the surface. This is a temporary emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart and spring-toothed harrows are examples of equipment which may produce the desired effect.

Sprinkling - Site is sprinkled until the surface is wet.

Barriers - Solid board fences, snow fences, burlap fences, crate walls, bales of hay and similar material can be used to control air currents and soil blowing.

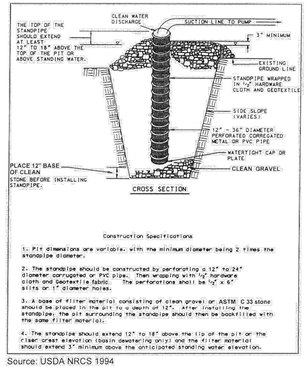
Calcium Chloride - Shall be in the form of loose, dry granules or flakes fine enough to feed through commonly used spreaders at a rate that will keep surface moist but not cause pollution or plant damage. If used on steeper slopes, then use other practices to prevent washing into streams or accumulation around plants.

Stone - Cover surface with crushed stone or coarse gravel.

2. Sump Pits are temporary pits which are used to remove excess water while minimizing sedimentation. The number of sump pits and their locations shall be included on the plans. Pits may be relocated to optimize use but discharge location changes must be coordinated with the local conservation district. The design must conform to the general criteria outlined on detail 14-2.

A perforated vertical standpipe is wrapped with 2" hardware cloth and geotextile fabric then placed in the center of an excavated pit which is then backfilled with filter material consisting of anything from clean gravel (minimal fines) to AST M C 33 stone (1 2" maximum diameter). Water is then pumped from the center of the standpipe to a suitable discharge area such as into a sediment basin or suitable filter.

Detail 14-2: Sump Pit



Source: USDA NRCS 1994

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REV.	DATE	DESCRIPTION
3	08-12-26	GENERAL REVISIONS
2	12-9-25	GENERAL REVISIONS
1	11-1-25	GENERAL REVISIONS.

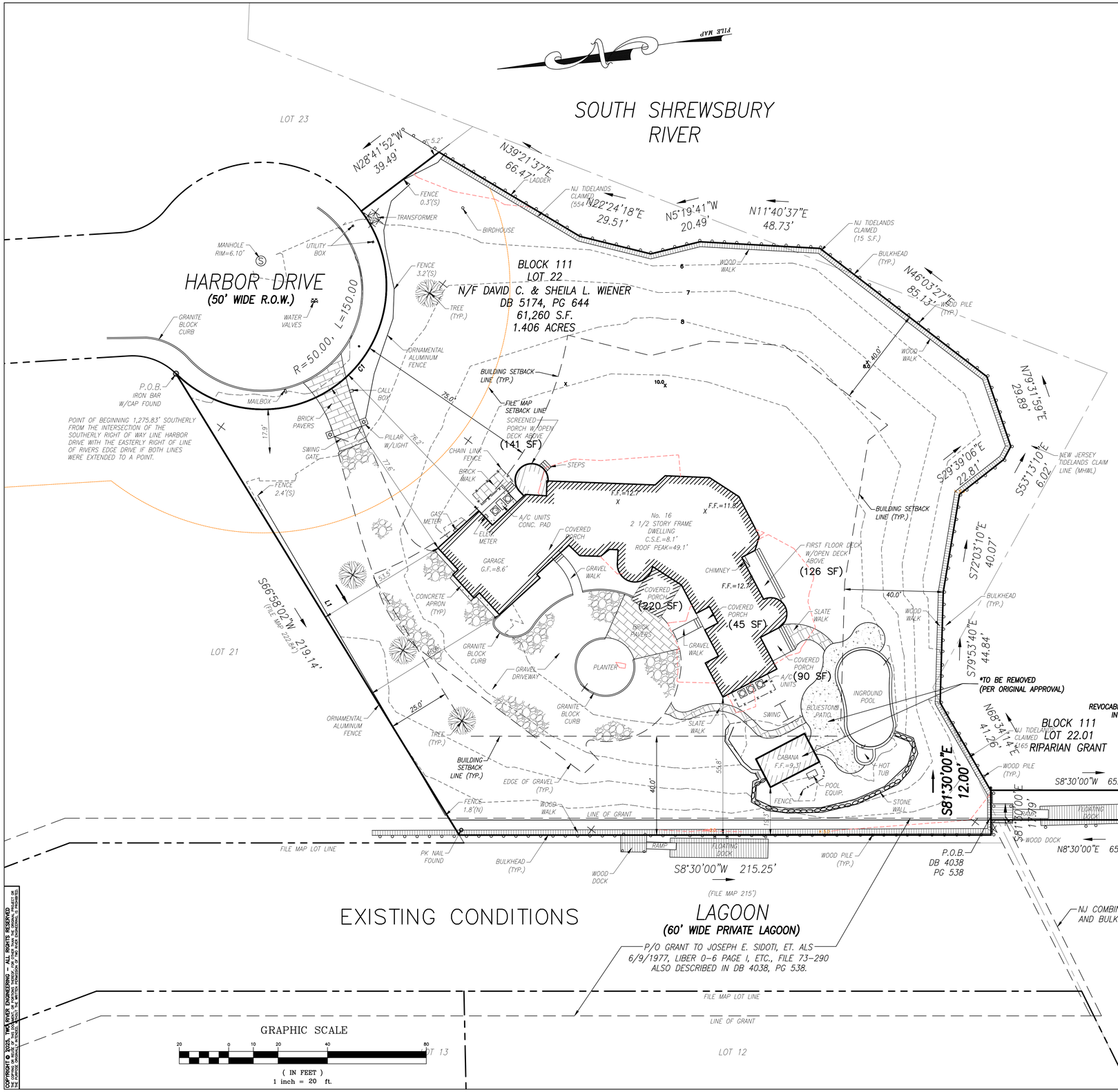
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Colts Neck, N.J. 07722 Fax: 732.866.4348

PROJECT NO.: 23112
DATE: AUGUST 11, 2025
DRAWING NO.: 23112PP
DRAWN BY: AJG
CLIENT: CINA
SCALE: AS SHOWN

NJDEP PERMIT PLAN
BUILDING PERMIT
PLOT PLAN
SOIL EROSION AND SEDIMENT CONTROL PLAN
16 HARBOR DRIVE
FOR
BLOCK 111
LOT 22
BOROUGH OF RUMSON
MONMOUTH COUNTY
NEW JERSEY

A.J. GARITO, JR.
08-12-2026
DATE
N.J. Professional Engineer
License No. 24GE03799700

SHEET NO. 5 OF 5



GENERAL NOTES

1. SITE IS KNOWN AS BLOCK 111 LOTS 22 & 22.01 AS DEPICTED ON BOROUGH OF RUMSON TAX MAP 34. TOTAL LOT AREA IS 1.406± ACRES.
2. APPLICANT:

   SEBASTIAN CINA
   16 HARBOR LANE
   RUMSON, NJ 07760
3. BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION TAKEN FROM A PLAN ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY 16 HARBOR DRIVE BLOCK 111, LOT 22 & 22.01, BOROUGH OF RUMSON MONMOUTH COUNTY NEW JERSEY" PREPARED BY KENNETH P. FRANK, NJPLS LIC. NO. 36727, DATED 5-31-2023.
4. THE PROPERTY IS LOCATED WITHIN THE R-2 RESIDENTIAL ZONE.

   APPLICANT PROPOSES TO CONSTRUCT A NEW IN-GROUND SWIMMING POOL AND SEVERAL PATIO AND WALKWAYS.
5. DO NOT SCALE DRAWINGS WITH RESPECT TO THE LOCATION OF SURROUNDING EXISTING FEATURES. ADJACENT AND SURROUNDING PHYSICAL CONDITIONS, BUILDINGS, STRUCTURES, ETC., ARE SCHEMATIC ONLY EXCEPT WHERE DIMENSIONS ARE SHOWN THERETO.
6. THIS SET OF PLANS HAS BEEN PREPARED FOR THE APPLICANT NAMED HEREON FOR THE PURPOSE OF MUNICIPAL AND REGULATORY AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION PLANS UNTIL ALL REQUIRED APPROVALS HAVE BEEN OBTAINED. NO OTHER PURPOSE IS INTENDED OR IMPLIED.
7. REFERENCE ARCHITECTURAL PLANS PREPARED BY FOR BUILDING INFORMATION.
8. THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF SITE CONDITIONS OR TOPOGRAPHY DIFFER MATERIALLY FROM THOSE PRESENTED HEREON. THE UNDERSIGNED PROFESSIONAL SHALL BE GRANTED ACCESS TO REVIEW SAID CONDITION, AND/OR RENDER THE DESIGN SHOWN HEREON TO THE APPROPRIATE MUNICIPAL, COUNTY OR STATE OFFICIAL'S AND/OR UNDERSIGNED PROFESSIONAL SATISFACTION.
9. STRUCTURAL / GEOTECHNICAL ENGINEER TO PROVIDE PLANS AND CALCULATIONS FOR ALL STRUCTURES AND FOUNDATIONS AS SHOWN ON THIS PLAN. THIS PLAN DOES NOT INCLUDE BUILDING CALCULATIONS EITHER STRUCTURAL OR GEOTECHNICAL AND THE UNDERSIGNED ASSUMES NO RESPONSIBILITY FOR SAME.
10. SILT FENCE SHALL BE PLACED AROUND THE AREA OF DISTURBANCE AND LEFT IN PLACE UNTIL THE PROPERTY IS PERMANENTLY STABILIZED.
11. TOPSOIL AND SEED/SOD SHALL BE INSTALLED FOR AREAS WHERE DEMOLITION AND REMOVAL OF SUCH ITEMS AS THE EXISTING DRIVEWAY, GARAGE, AND DWELLING.



KEY MAP

APPROVED ZONING PERMIT 04/20/24

	APPROVED	ACTUAL
BUILDING COVERAGE	5,961 SF	5,979 SF
LOT COVERAGE	12,040 SF (DID NOT INCLUDE POOL)	12,969 SF (INCLUDES POOL)

EXISTING BUILDING COVERAGE CALCULATION

DWELLING	5,357 SF
COVERED PORCH	220 SF
COVERED PORCH	45 SF
REAR PORCH	90 SF
REAR PORCH	126 SF
REAR PORCH	141 SF
TOTAL	5,979 SF
LOT AREA	61,260 SF
BUILDING COVERAGE	9.76%

EXISTING LOT COVERAGE CALCULATION

BUILDING	5,979 SF
DRIVEWAY	6,153 SF
POOL	837 SF
TOTAL	12,969 SF
LOT AREA	61,260 SF
LOT COVERAGE	21.17%

REV.	DATE	DESCRIPTION
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PROJECT NO.: 23112
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NJDEP PERMIT PLAN
BUILDING PERMIT
PLOT PLAN
SOIL EROSION AND SEDIMENT CONTROL PLAN

16 HARBOR DRIVE

FOR

BLOCK 111
LOT 22

BOROUGH OF RUMSON
MONMOUTH COUNTY
NEW JERSEY

A.J. GARITO, JR.
08-12-2026
DATE
N.J. Professional Engineer
License No. 24GE03799700

SHEET NO. 1 OF 5

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EXHIBIT
A-12

GENERAL DATA

BLOCK	111
LOT	22 & 22.1
HOUSE #	16
TOWNSHIP	BOROUGH OF RUMSON
COUNTY	MONMOUTH

SCOPE OF WORK

PROPOSED ALTERATION / EXTENSION TO A DETACHED ONE FAMILY DWELLING.

PROPOSED EXTERIOR IMPROVEMENTS INCREASE IN BUILDING COVERAGE AND INCREASE IN IMPERVIOUS AREA, SUBJECT TO VARIANCE APPROVAL.

LEGEND

- < > PROPOSED GRADE
- ( ) EXISTING GRADE
- DENOTES DIRECTION OF PHOTOGRAPH
- STREET LINE
- ZONING LOT LINE
- REQUIRED YARD SETBACK
- PROPOSED DRIVEWAY, DECK AND WALKWAYS

ARCHITECTURAL DRAWING

A-001.00 - ARCHITECTURAL PLOT PLAN, ZONING INFORMATION & GENERAL NOTES

SITE PLAN NOTES

TOPOGRAPHIC SURVEY PREPARED BY KF2T PROFESSIONAL LAND SURVEYORS AND IS INCLUDED IN THE APPLICATION.

KF2T PROFESSIONAL LAND SURVEYORS TO PROVIDE TOPOGRAPHIC DESIGN & GRADING.

OWNER/BUILDER OF THE REFERENCED PROPERTY STATE THAT WORK DONE UNDER THIS APPLICATION WILL HAVE NO ADVERSE EFFECT ON ANY SURROUNDING PROPERTIES CONCERNING STORM WATER DRAINAGE MOREOVER, HE WILL BE RESPONSIBLE TO MAKE CERTAIN THAT WHILE THE WORK IS BEING DONE, THE SURROUNDING PROPERTIES WILL BE PROTECTED.

KOI POND CONSTRUCTION NOTE: REMOVAL OF CHLORINE FILTRATION SYSTEM AND REPLACE WITH NATURAL FILTRATION SYSTEM, DEPTH OF KOI POND TO BE MAINTAINED AS A MINIMUM OF 4'-0", AND EQUIPED WITH UV LIGHT AND AERATION SYSTEM.

INGROUND POOL GENERAL SOIL GUIDELINES AND PREPARATION DETAILING TO BE PROVIDED BY POOL DESIGNER AND INSTALLER. NEW INFINITY EDGE POOL TO BEAR ON FIRM STABLE SOIL, AS INDICATED ON THE SOIL BORING LOG AND ANALYSIS FOR THIS SITE. EXCAVATION TO THIS DEPTH, IT IS ANTICIPATED, WILL REQUIRE DEWATERING AND STABILIZATION OF ADJACENT SOIL. THE BACKFILLING OF CLEAN SOIL AND A GRAVEL BASE FOR BEARING DISTRIBUTION OF THE POOL WILL REQUIRE LIFTS AS RECOMMENDED BY THE SOIL ENGINEER FOR PROPER COMPACTION.

CODE DATA

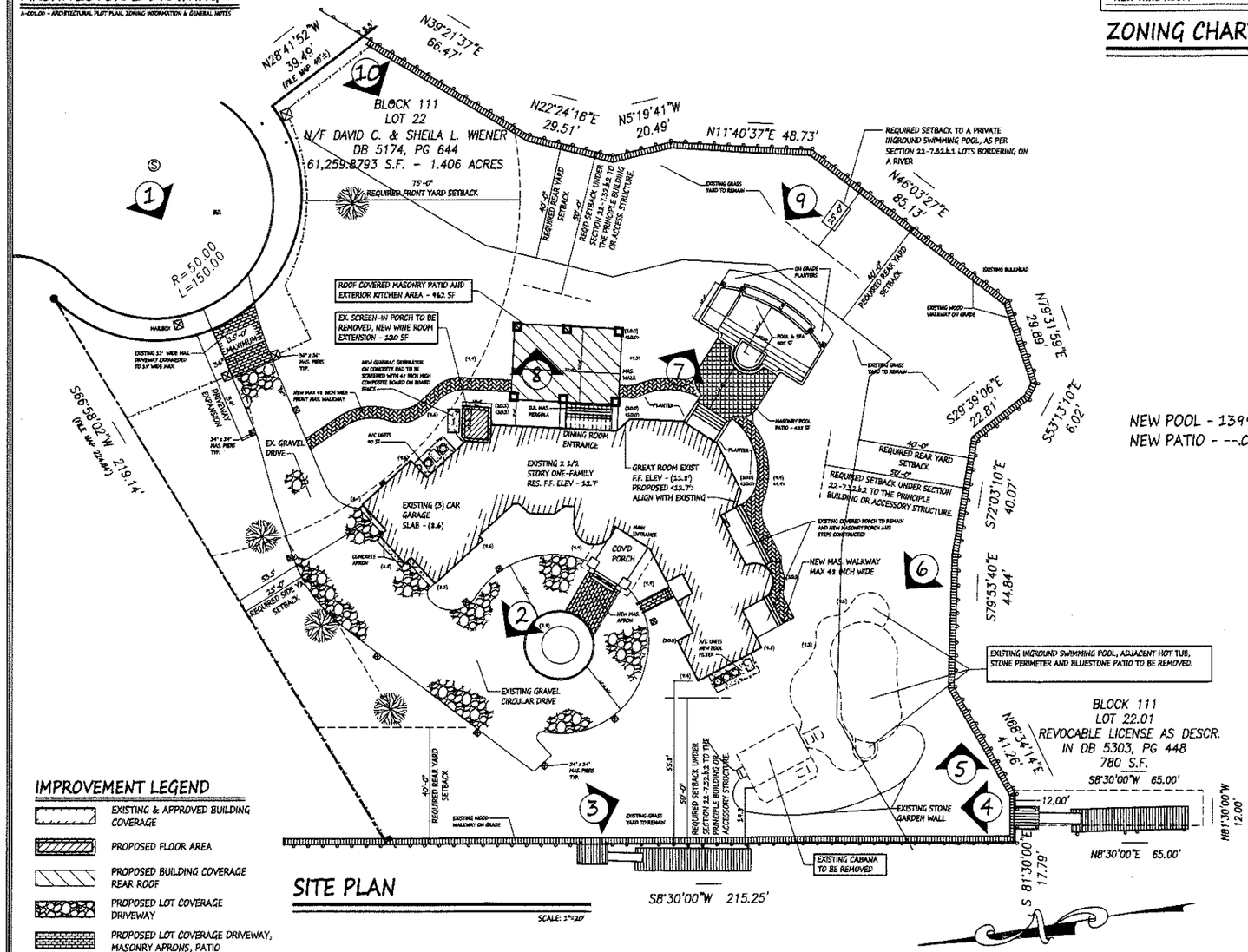
IDENTIFICAL OF PROJECT:
16 HARBOR DRIVE,
BOROUGH OF RUMSON, NJ

BUILDING / SITE CHARACTERISTICS:
NUMBER OF STORIES - (2)
MAX LIVE LOAD - 40#
LOCATED WITHIN A FLOOD ZONE
NO CHANGE IN OCCUPANCY
CONSTRUCTION CLASS. - WOOD FRAME

APPLICABLE CONSTRUCTION CODES:
2021 INTERNATIONAL BUILDING CODE, NJ EDITION
2020 NATIONAL ELECTRIC CODE
2021 NATIONAL STANDARD PLUMBING CODE
2021 INTERNATIONAL MECHANICAL CODE
2021 INTERNATIONAL FUEL GAS CODE
2021 ENERGEY SUBCODE

ELEVATION CERTIFICATE INFORMATION
ELEVATION CERTIFICATE AS PROVIDED AND CERTIFIED BY KENNETH P. FRANK, PROFESSIONAL LAND SURVEYOR, KF2T PROFESSIONAL LAND SURVEYORS

MAP/PANEL - 34025C0214H
SUFFIX - H
FIRM INDEX DATE - 09-25-2008
FIRM PANEL EFF. REVISED DATE - 09-25-2008
FLOOD ZONE - AE (EL 9)
BASE FLOOD ELEVATION(S) - NA



SITE PLAN

SCALE: 1"=20'

IMPROVEMENT LEGEND

- EXISTING & APPROVED BUILDING COVERAGE
- PROPOSED FLOOR AREA
- PROPOSED BUILDING COVERAGE REAR ROOF
- PROPOSED LOT COVERAGE DRIVEWAY
- PROPOSED LOT COVERAGE DRIVEWAY, MASONRY APRONS, PATIO
- EXCLUDED WALKWAYS PER SCHEDULE 5-1, NOTE 5.a
- EXCLUDED PATIO PER SCHEDULE 5-1, NOTE 5.b

MAXIMUM PERMITTED FLOOR AREA RATIO PER SCHEDULE 5-3A

FACTOR	UASABLE LOT AREA	F.A.R. PERMITTED	MAXIMUM PERMITTED FLOOR AREA		
USABLE LOT AREA OF LOT IF LESS THAN OR EQUAL TO 5,000 SF - USE 5,000 SF IF USABLE LOT AREA IS OVER 5,000 SF	5,000 SF	(X) 0.4	2,000 SF	-	-
USABLE LOT AREA OF LOT OVER 5,000 SF - USE 5,000 SF IF USABLE LOT AREA IS 30,000 SF OR MORE.	5,000 SF	(X) 0.3	1,500 SF	-	-
USABLE LOT AREA OF LOT OVER 30,000 SF - USE 60,000 SF IF USABLE LOT AREA IS 70,000 SF OR MORE.	53,259.87 SF	(X) 0.1	5,325.98 SF	-	-
ADD MAX. PERMITTED FA COLUMNS	-	-	8,625.98 SF	-	-
MAXIMUM PERMITTED FAR	-	-	.14	-	-

	PERMITTED / ALLOW.	EXISTING / APPROVED PER ZONING PERMIT - 4/26/2024	PROPOSED	COMPLIES	VARIANCE REQUIRED
FLOOR AREA SUMATION	8,626 SF	8,792.4 SF	8,912.40 SF (*120 SF)	NO	YES

* NEW WINE ROOM

ZONING CHART

DAVID J. DARCY, RA
ARCHITECT
N. Y. REGISTRATION No. 033831
N. J. REGISTRATION No. 17079
P. A. LICENSE No. RA406837

20	DESIGN GUIDANCE	8/8/24 BD
19	DESIGN GUIDE REVISIONS	7/18/24 BD
18	REVISIONS AS PER - BOARD ENG REPT. & PLANNER	06/06/2024
17	BD AND LC SUBMISSION	5/8/24 BD
16	REVISIONS BASED UPON BD LETTER	7/18/23 BD
15	REVISIONS BASED UPON SIGNAL LETTER	6/21/23 BD
14	VARIANCE SMALL REVISION	3/24/23 BD
13	DEC PERMIT	1/18/23 BD
12	REVISED DRAWS FOR VARIANCE	11/1/22 BD
11	REV. FOR VARIANCE & ENGINEER PLANNER	10/28/2022
10	REVISED DRAWS FOR VARIANCE	3/24/22 BD
9	SMALL REV TO TOWN	3/14/22 BD
8	SMALL REV. DRAWS TOWARD	3/8/22 BD
7	SMALL REV TO TOWN	2/4/22 BD
6	TOWN/APPROL COMMENTS	2/28/22 BD
5	REVISED PLANS	1/6/22 BD
4	SUBMISSION FOR ZONING REVIEW	9/24/21 BD
3	REVISIONS FOR ZONING REVIEW	9/14/21 BD
2	SMALL REV TO TOWN ZONING REVIEW	7/26/21 BD
1	SMALL REV TO TOWN	6/28/21 BD
NO.	ISSUE / SUBMISSION	DATE BY

PROJECT TITLE
PROPOSED ALTERATION / EXT. TO A ONE FAMILY RES. FOR MR. & MRS. CINA
16 HARBOR DRIVE
BOROUGH OF RUMSON, NJ

SHEET TITLE
ARCHITECTURAL PLOT PLAN, ZONING INFORMATION & GENERAL NOTES

PROJECT NO. 20-001
DATE 6/25/2021
SCALE AS SHOWN
DESIGNED BY: BD
DRAWN BY: BD
CHECKED BY: BD
APPROVED BY: BD

SHEET NO. A-001.03
ARCHITECT SEAL

SHEET 1 OF 19

EXHIBIT tabbies A-13

ADDENDUM

BOROUGH OF RUMSON SCHEDULE 5-1	PERMITTED / REQ'D	EXISTING	LAST VARIANCE SUBMISSION	NEW VARIANCE SUBMISSION	COMPLIANCE
ZONING DISTRICT	R-2	SINGLE-FAMILY RES.	SINGLE-FAMILY RES.	SINGLE-FAMILY RES.	YES
MIN. LOT AREA	1.0 ACRE	1.406 ACRE (61,260 SF)	1.406 ACRE	1.406 ACRE	YES
MIN. LOT FRONTAGE	150 FT.	150 FT.	150 FT.	150 FT.	YES
MIN. LOT WIDTH	150 FT.	150 FT.	150 FT.	150 FT.	YES
INTERIOR SHAPE LOT	100 FT.	➢ 100 FT.	➢ 100 FT.	➢ 100 FT.	YES
MIN. FRONT YARD	75 FT.	76.2 FT.	75.0 FT.	76.2 FT.	YES
MIN. ONE SIDE YARD	25 FT.	53.5 FT.	53.5 FT.	53.5 FT.	YES
TOTAL OF (2) SIDE YARDS	50 FT.	NA	NA	NA	YES
MIN. REAR YARD	40 FT.	55.8 FT.	41.33 FT. (ACC. PERGOLA)	55.8 FT.	YES (ACC. PERGOLA REMOVED)
ACCESSORY BUILDING REQUIREMENTS					
MIN. ACC. BLDG. SIDE YARD	15 FT.	NA	NA	NA	YES
MIN. ACC. BLDG. REAR YARD	15 FT.	19.3 FT.	19.3 FT.	NA	YES (CABANA REMOVED)
BORDERING A RIVER	50 FT.	19.3 FT.	19.3 FT.	NA	YES (CABANA REMOVED)
STORIES	1 1/2	1 1/2	1	NA	YES
HEIGHT	24 FT.	15 FT.	15 FT.	NA	YES
INGROUND POOL BORDERING A RIVER - EXISTING - NEW POOL/SPA	 25 FT. 25 FT	 19'-4" -	 19'-4" 46'-6"	 NA 46'-6"	 YES - (EX POOL REMOVED) YES
PRINCIPAL BUILDING					
MAX BUILDING COVERAGE	5273 SF	5962 SF 5131 at purchase	7659 SF (1697)	6920.00 SF (958) - REDUCED 44%	NO - ~~16%~~ VAR. REQUEST OVER EXISTING 31% over PERMITTED
MAX LOT COVERAGE	13,788.26 SF	12,969 SF	18,862 SF (5073.74)	15,577.00 SF (1788.74) - REDUCED 65%	NO - 13% VAR. REQUEST OVER PERMITTED
MIN GROSS RES. GROUND FLR. AREA	1200 SF	4665.65 SF	5123.15 SF	4785.65 SF	YES
MAX GROSS FLOOR AREA	8626.00 SF	8792.40 SF	9250 SF (457.50)	8896.40 SF (103.50 SF VAR.) REDUCED 75%	NO - 1.1 % VAR. REQUEST OVER EXISTING
MAX FLOOR AREA RATIO	0.14	0.143	.15	.145	NO
MAX BUILDING HEIGHT - EAVES - HEIGHT - STORIES	 32 FT. 40 FT. 2 1/2 STORIES	 19 FT. 39.3 FT. 2 1/2 STORIES	 19 FT. 39.3 FT. 2 1/2 STORIES	 19 FT. 39.3 FT. 2 1/2 STORIES	 YES YES YES

EXHIBIT
A-14

CINA Residence - 16 Harbor Drive

ADDENDUM #2 - VARIANCES REQUESTED

BOROUGH OF RUMSON SCHEDULE 5-1	ALLOWED UNDER ORDINANCE	LAST VARIANCE REQUEST	NEW VARIANCE REQUEST	REDUCTION
MAX BUILDING COVERAGE	5273 sf *	7659 sf	6920 sf	739 sf
MAX LOT COVERAGE	13,788.26 sf	18,862 SF	15,577 sf	3,285 sf
MAX GROSS FLOOR AREA	8626 sf **	9250 sf	8896.40 sf	353.60 sf
MAX FLOOR AREA RATIO	0.14	0.15	0.145	0.005

Variance requests for setback required for 'Lots Bordering on a River' are no longer requested for:

- Pergola covered patio – Removed
- Cabana – Removed
- Original swimming pool and spa – Removed

*Per ordinance – Max BC

- 5731.3 sf - At time of purchase
- 5962.0 sf - Existing, built with permits

** Per ordinance – Max FA

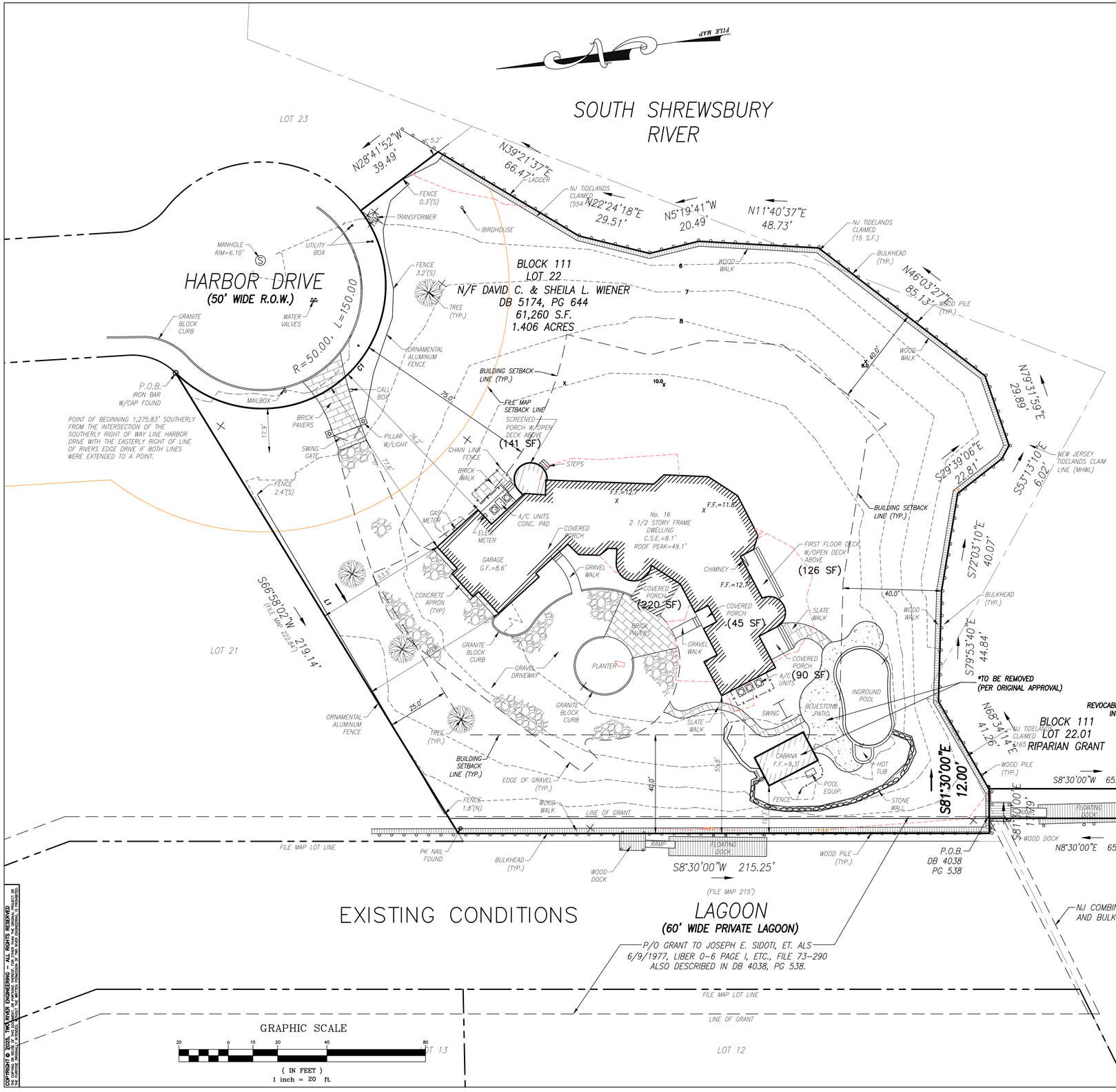
- 8792.4 sf Existing, built with permits

Plus Utility Room
103.5 SF FA / 120 SF BC

APPLICATION UPDATE PACKAGE

ZB Application #26-8113, Cina, 16 Harbor Drive

Updated Documents for the October 22, 2026 Meeting



GENERAL NOTES

1. SITE IS KNOWN AS BLOCK 111 LOTS 22 & 22.01 AS DEPICTED ON BOROUGH OF RUMSON TAX MAP 34. TOTAL LOT AREA IS 1.406± ACRES.
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   SEBASTIAN CINA
   16 HARBOR LANE
   RUMSON, NJ 07760
3. BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION TAKEN FROM A PLAN ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY 16 HARBOR DRIVE BLOCK 111, LOT 22 & 22.01, BOROUGH OF RUMSON MONMOUTH COUNTY NEW JERSEY" PREPARED BY KENNETH P. FRANK, NJPLS LIC. NO. 36727, DATED 5-31-2023.
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KEY MAP

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DWELLING	5,357 SF
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REAR PORCH	141 SF
TOTAL	5,979 SF
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EXISTING LOT COVERAGE CALCULATION

BUILDING	5,979 SF
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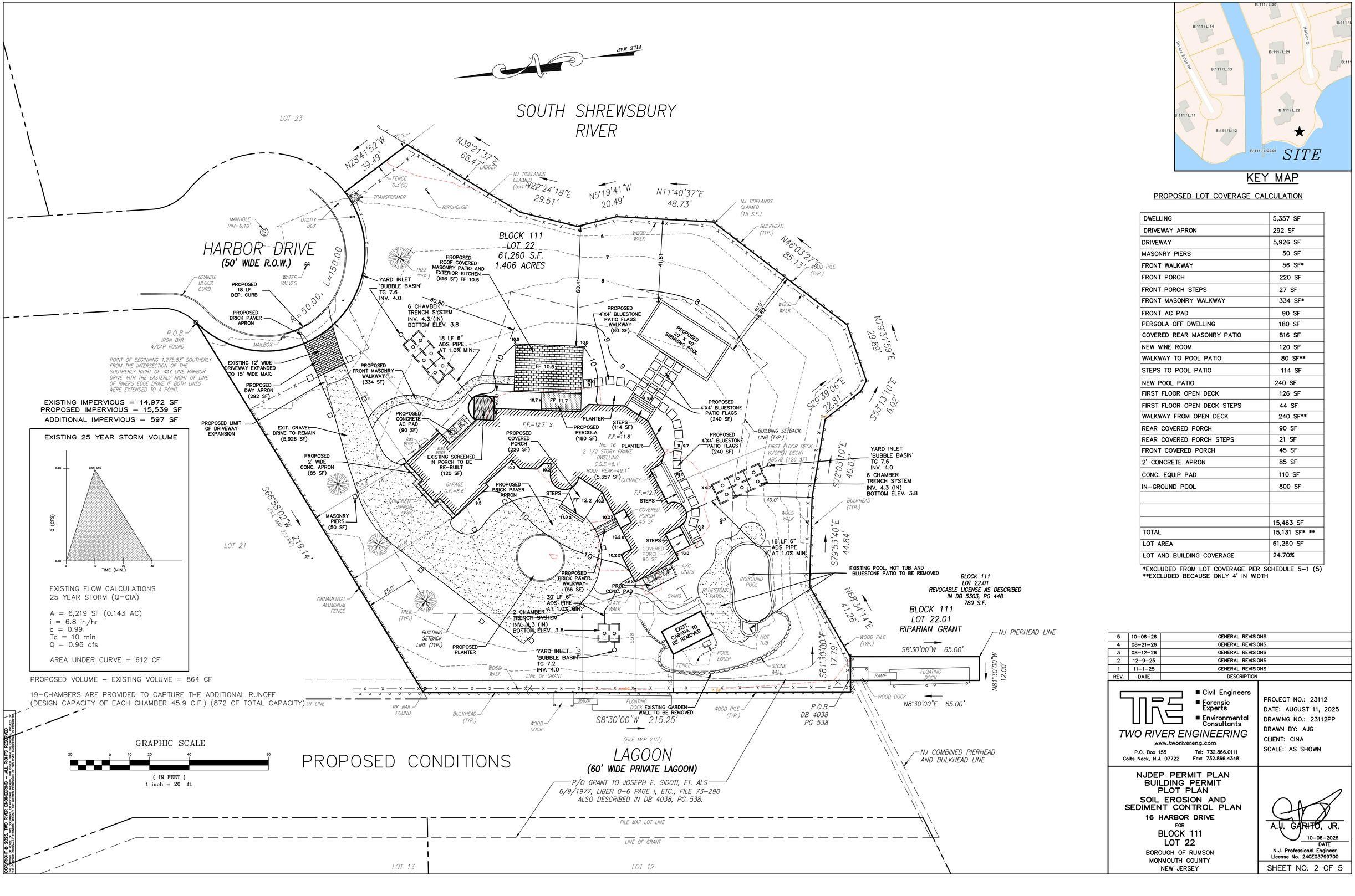
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16 HARBOR DRIVE
FOR
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BOROUGH OF RUMSON
MONMOUTH COUNTY
NEW JERSEY

A.J. CARITO, JR.
10-26-2026
DATE
N.J. Professional Engineer
License No. 24GE03799700

SHEET NO. 1 OF 5

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KEY MAP

PROPOSED LOT COVERAGE CALCULATION

DWELLING	5,357 SF
DRIVEWAY APRON	292 SF
DRIVEWAY	5,926 SF
MASONRY PIERS	50 SF
FRONT WALKWAY	56 SF*
FRONT PORCH	220 SF
FRONT PORCH STEPS	27 SF
FRONT MASONRY WALKWAY	334 SF*
FRONT AC PAD	90 SF
PERGOLA OFF DWELLING	180 SF
COVERED REAR MASONRY PATIO	816 SF
NEW WINE ROOM	120 SF
WALKWAY TO POOL PATIO	80 SF**
STEPS TO POOL PATIO	114 SF
NEW POOL PATIO	240 SF
FIRST FLOOR OPEN DECK	126 SF
FIRST FLOOR OPEN DECK STEPS	44 SF
WALKWAY FROM OPEN DECK	240 SF**
REAR COVERED PORCH	90 SF
REAR COVERED PORCH STEPS	21 SF
FRONT COVERED PORCH	45 SF
2' CONCRETE APRON	85 SF
CONC. EQUIP PAD	110 SF
IN-GROUND POOL	800 SF
	15,463 SF
TOTAL	15,131 SF* **
LOT AREA	61,260 SF
LOT AND BUILDING COVERAGE	24.70%

*EXCLUDED FROM LOT COVERAGE PER SCHEDULE 5-1 (5)
**EXCLUDED BECAUSE ONLY 4' IN WIDTH

REV.	DATE	DESCRIPTION
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4	08-21-26	GENERAL REVISIONS
3	08-12-26	GENERAL REVISIONS
2	12-9-25	GENERAL REVISIONS
1	11-1-25	GENERAL REVISIONS

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PROJECT NO.: 23112
DATE: AUGUST 11, 2025
DRAWING NO.: 23112PP
DRAWN BY: AJG
CLIENT: CINA
SCALE: AS SHOWN

NJDEP PERMIT PLAN
BUILDING PERMIT
PLOT PLAN
SOIL EROSION AND SEDIMENT CONTROL PLAN
16 HARBOR DRIVE
FOR
BLOCK 111
LOT 22
BOROUGH OF RUMSON
MONMOUTH COUNTY
NEW JERSEY

A.U. GARITO, JR.
10-06-2026
DATE
N.J. Professional Engineer
License No. 24GE03799700

SHEET NO. 2 OF 5

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ADDENDUM #3

BOROUGH OF RUMSON SCHEDULE 5-1	PERMITTED / REQ'D	EXISTING	LAST VARIANCE SUBMISSION	NEW VARIANCE SUBMISSION	COMPLIANCE
ZONING DISTRICT	R-2	SINGLE-FAMILY RES.	SINGLE-FAMILY RES.	SINGLE-FAMILY RES.	YES
MIN. LOT AREA	1.0 ACRE	1.406 ACRE (61,260 SF)	1.406 ACRE	1.406 ACRE	YES
MIN. LOT FRONTAGE	150 FT.	150 FT.	150 FT.	150 FT.	YES
MIN. LOT WIDTH	150 FT.	150 FT.	150 FT.	150 FT.	YES
INTERIOR SHAPE LOT	100 FT.	≥ 100 FT.	≥ 100 FT.	≥ 100 FT.	YES
MIN. FRONT YARD	75 FT.	76.2 FT.	75.0 FT.	76.2 FT.	YES
MIN. ONE SIDE YARD	25 FT.	53.5 FT.	53.5 FT.	53.5 FT.	YES
TOTAL OF (2) SIDE YARDS	50 FT.	NA	NA	NA	YES
MIN. REAR YARD	40 FT.	55.8 FT.	41.33 FT. (ACC. PERGOLA)	55.8 FT.	YES (ACC. PERGOLA REMOVED)
ACCESSORY BUILDING REQUIREMENTS					
MIN. ACC. BLDG. SIDE YARD	15 FT.	NA	NA	NA	YES
MIN. ACC. BLDG. REAR YARD	15 FT.	19.3 FT.	19.3 FT.	NA	YES (CABANA REMOVED)
BORDERING A RIVER	50 FT.	19.3 FT.	19.3 FT.	NA	YES (CABANA REMOVED)
STORIES	1 1/2	1 1/2	1	NA	YES
HEIGHT	24 FT.	15 FT.	15 FT.	NA	YES
INGROUND POOL BORDERING A RIVER					
– EXISTING	25 FT.	19'-4''	19'-4''	NA	YES – (EX POOL REMOVED)
– NEW POOL/SPA	25 FT	–	46'-6''	46'-6''	YES
PRINCIPAL BUILDING					
MAX BUILDING COVERAGE	5273 SF	5962 SF	7659 SF (1697)	NA	YES
MAX LOT COVERAGE	13,788.26 SF	12,969 SF	18,862 SF (5073.74)	15,131.00 SF (1,342.74) - REDUCED 74%	NO – 9.7% VAR. REQUEST OVER PERMITTED
MIN GROSS RES. GROUND FLR. AREA	1200 SF	4665.65 SF	5123.15 SF	4785.65 SF	YES
MAX GROSS FLOOR AREA	8626.00 SF	8792.40 SF	9250 SF (457.50)	NA	YES
MAX FLOOR AREA RATIO	0.14	0.143	.15	NA	YES
MAX BUILDING HEIGHT					
– EAVES	32 FT.	19 FT.	19 FT.	19 FT.	YES
– HEIGHT	40 FT.	39.3 FT.	39.3 FT.	39.3 FT.	YES
– STORIES	2 1/2 STORIES	2 1/2 STORIES	2 1/2 STORIES	2 1/2 STORIES	YES

Zoning Chart Analysis 8/17/2026

CINA Residence - 16 Harbor Drive

ADDENDUM #4 - VARIANCES REQUESTED

BOROUGH OF RUMSON SCHEDULE 5-1	ALLOWED UNDER ORDINANCE	LAST VARIANCE REQUEST	NEW VARIANCE REQUEST	REDUCTION
MAX LOT COVERAGE	13,788.26 sf	18,862 SF	15,131 sf	3,731 sf*

*Represents 9.7% of Allowed under Ordinance

Variance requests for setback required for 'Lots Bordering on a River' are no longer requested for:

- Pergola covered patio – Removed
- Cabana – Removed
- Original swimming pool and spa – Removed

Variance for Max. Building Coverage is no longer requested

Variance for Max. Gross Floor Area is no longer requested

Variance for Max. Floor Area Ratio, is no longer requested

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FILE MAP

SOUTH SHREWSBURY RIVER

LOT 23

N28°41'52"W 39.49'

N39°21'37"E 66.47'

N22°24'18"E 29.51'

N5°19'41"W 20.49'

N11°40'37"E 48.73'

N46°03'27"E 85.13'

N79°31'59"E 29.89'

S29°39'06"E 22.81'

S53°13'10"E 6.02'

S72°03'10"E 40.0'

S79°53'40"E 44.84'

S68°34'14"E 41.26'

S81°30'00"E 17.79'

S8°30'00"W 215.25'

S8°30'00"W 65.00'

N8°30'00"E 65.00'

N81°30'00"W 12.00'

S66°58'02"W 219.14'
(FILE MAP 212.84')

5.2'

FENCE 0.3'(S)

LADDER

TRANSFORMER

BIRDHOUSE

NJ TIDELANDS CLAIMED (554 S.F.)

NJ TIDELANDS CLAIMED (15 S.F.)

BULKHEAD (TYP.)

WOOD WALK

WOOD PILE (TYP.)

MANHOLE RIM=6.10'

UTILITY BOX

HARBOR DRIVE
(50' WIDE R.O.W.)

WATER VALVES

GRANITE BLOCK CURB

R=50.00, L=150.00

TREE (TYP.)

BLOCK 111
LOT 22
61,260 S.F.
1.406 ACRES

41.81'

60.41'

40.01'

44.82'

YARD INLET 'BUBBLE BASIN' TG 7.6 INV. 4.0

6 CHAMBER TRENCH SYSTEM INV. 4.3 (IN) BOTTOM ELEV. 3.8

18 LF 6" ADS PIPE AT 1.0% MIN.

P.O.B. IRON BAR W/CAP FOUND

MAILBOX

POINT OF BEGINNING 1,275.83' SOUTHERLY FROM THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE HARBOR DRIVE WITH THE EASTERLY RIGHT OF LINE OF RIVERS EDGE DRIVE IF BOTH LINES WERE EXTENDED TO A POINT.

PROPOSED 25' X 50' STABILIZED CONSTRUCTION ENTRANCE

LIMIT OF DISTURBANCE 0.9 ACRES

SILT FENCE

INLET PROTECTION

F.F.=12.7'

F.F.=11.8'

No. 16
2 1/2 STORY FRAME DWELLING
C.S.E.=8.1'
ROOF PEAK=49.1'

CHIMNEY

F.F.=12.1'

GAS METER

ELEC. METER

GARAGE G.F.=8.6'

CONCRETE APRON (TYP.)

COVERED PORCH 45 SF

COVERED PORCH 90 SF

A/C UNITS

INGROUND POOL

SWING

GUESTIONS PATIO

SLATE WALK

HOT TUB

POOL EQUIP.

FENCE

STONE WALL

SOIL STOCKPILE

BUILDING SETBACK LINE (TYP.)

FIRST FLOOR DECK W/ LOWER DECK ROOF (126 SF)

YARD INLET 'BUBBLE BASIN' TG 7.6 INV. 4.0

6 CHAMBER TRENCH SYSTEM INV. 4.3 (IN) BOTTOM ELEV. 3.8

18 LF 6" ADS PIPE AT 1.0% MIN.

30 LF 6" ADS PIPE AT 1.0% MIN.

2-CHAMBER TRENCH SYSTEM INV. 4.3 (IN) BOTTOM ELEV. 3.8

YARD INLET 'BUBBLE BASIN' TG 7.2 INV. 4.0

LINE OF GRANT

BUILDING SETBACK LINE (TYP.)

ORNAMENTAL ALUMINUM FENCE

TREE (TYP.)

25.0'

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

SOIL COMPACTION MITIGATION NOT REQUIRED AS AREA IS LESS THAN 500 SF

BLOCK 111
LOT 22.01
REVOCABLE LICENSE AS DESCRIBED IN DB 5303, PG 448
780 S.F.

BLOCK 111
LOT 22.01
RIPARIAN GRANT

NJ PIERHEAD LINE

WOOD PILE (TYP.)

RAMP

FLOATING DOCK

WOOD DOCK

NJ COMBINED PIERHEAD AND BULKHEAD LINE

P.O.B.
DB 4038
PG 538

PK NAIL FOUND

BULKHEAD (TYP.)

WOOD DOCK

FILE MAP LOT LINE

LINE OF GRANT

LAGOON
(60' WIDE PRIVATE LAGOON)

P/O GRANT TO JOSEPH E. SIDOTI, ET. ALS
6/9/1977, LIBER O-6 PAGE 1, ETC., FILE 73-290
ALSO DESCRIBED IN DB 4038, PG 538.

LOT 21

LOT 13

LOT 12

SOIL EROSION & SEDIMENT CONTROL PLAN

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SHEET NO. 3 OF 5

TOPSOIL SCHEDULE

A. MATERIALS

1. TOPSOIL SHALL BE FRIABLE, LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES AND CONTAIN NO TOXIC SUBSTANCE OR ADVERSE CHEMICAL OR PHYSICAL CONDITION THAT MAY BE HARMFUL TO PLANT GROWTH. SOLUBLE SALTS SHALL NOT BE EXCESSIVE (CONDUCTIVITY LESS THAN 0.5 MILLIMHOS PER CENTIMETER. MORE THAN 0.5 MILLIMHOS MAY DESICATE SEEDLINGS AND ADVERSELY IMPACT GROWTH). TOPSOIL HAULED IN FROM OFFSITE SHALL HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.75 PERCENT. ORGANIC MATTER CONTENT MAY BE RAISED BY ADDITIVES.

2. TOPSOIL SUBSTITUTE IS A SOIL MATERIAL WHICH MAY HAVE BEEN AMENDED WITH SAND, SILT, CLAY, ORGANIC MATTER, FERTILIZER OR LIME AND HAS THE APPEARANCE OF TOPSOIL. TOPSOIL SUBSTITUTES MAY BE UTILIZED ON SITES WITH INSUFFICIENT TOPSOIL FOR ESTABLISHING PERMANENT VEGETATION. ALL TOPSOIL SUBSTITUTE MATERIALS SHALL MEET THE REQUIREMENTS OF TOPSOIL NOTED ABOVE. SOIL TESTS SHALL BE PERFORMED TO DETERMINE THE COMPONENTS OF SAND, SILT, CLAY, ORGANIC MATTER, SOLUBLE SALTS AND PH LEVEL.

B. STRIPPING AND STOCKPILING

1. FIELD EXPLORATION SHALL BE MADE TO DETERMINE WHETHER QUANTITY AND OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.

2. STRIPPING SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA.

3. LIME SHALL BE APPLIED BEFORE STRIPPING AT A RATE DETERMINED BY SOIL TESTS TO BRING THE SOIL PH TO APPROXIMATELY 6.5. IN LIEU OF SOIL TESTS, SEE THE LIME RATE GUIDE IN THE NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARD "SEEDBED PREPARATION FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION".

4. FULL-DEPTH TOPSOIL STRIPPING SHALL BE PERFORMED.

5. STOCKPILES OF TOPSOIL SHALL BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFFSITE ENVIRONMENTAL DAMAGE.

6. STOCKPILES SHALL BE VEGETATED IN ACCORDANCE WITH NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARD FOR "PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION" OR "TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION". WEEDS SHALL NOT BE ALLOWED TO GROW ON STOCKPILES.

C. SITE PREPARATION

1. GRADE AT THE ONSET OF THE OPTIMAL SEEDING PERIOD SO AS TO MINIMIZE THE DURATION AND AREA OF EXPOSURE OF DISTURBED SOIL TO EROSION. IMMEDIATELY PROCEED TO ESTABLISH VEGETATIVE COVER IN ACCORDANCE WITH THE SPECIFIED SEED MIXTURE. TIME IS OF THE ESSENCE.

2. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE. THE NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARD FOR "LAND GRADING" SHALL APPLY.

3. AS GUIDANCE FOR IDEAL CONDITIONS, SUBSOIL SHALL BE TESTED FOR LIME REQUIREMENT. LIMESTONE, IF NEEDED, SHALL BE APPLIED TO BRING SOIL TO A PH OF APPROXIMATELY 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.

4. IMMEDIATELY PRIOR TO TOPSOILING, THE SURFACE SHALL BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS WILL HELP INSURE A GOOD BOND BETWEEN THE TOPSOIL AND SUBSOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.)

5. EMPLOY NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENTATION BASINS, AND WATERWAYS. SEE NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARDS AS APPLICABLE.

D. APPLY TOPSOIL

1. TOPSOIL SHALL BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE.

2. TOPSOIL SHALL BE APPLIED AT A UNIFORM DEPTH AS INIDCATED ON THE PLANS. SOILS WITH A PH OF 4.0 OR LESS CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A pH OF 5.0 OR MORE, IN ACCORDANCE WITH THE NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARD FOR "MANAGEMENT OF HIGH ACID PRODUCING SOIL".

NOTE: THE PLAN SHALL MEET THE STANDARDS FOR DEWATERING DEPICTED IN "THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY" AS SHOWN ON SHEET 14-1 TO 14-6.

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE FREEHOLD SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY.
2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RECERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
4. N.J.S.A. 4:24-39 ET.SEQ. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE DISTRICT DETERMINES THAT A PROJECT OR PORTION THEREOF IS IN FULL COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON WRITTEN REQUEST FROM THE APPLICANT, THE DISTRICT MAY ISSUE A REPORT OF COMPLIANCE WITH CONDITIONS ON A LOT BY LOT OR SECTION BY SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN IMPLIMENTED, INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK.
5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED FOR MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2-2½ TONS PER ACRE, ACCORDING TO THE STANDARD FOR STABILIZATION WITH MULCH ONLY.
6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. SOIL STOCKPILES, STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH ANCHOR, IN ACCORDANCE WITH STATE STANDARDS.
7. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF PRELIMINARY GRADING.
8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRE A STABILIZED CONSTRUCTION ACCESS CONSISTING OF 1" - 2" STONE FOR A MINIMUM LENGTH OF 10' EQUAL TO THE LOT ENTRANCE WIDTH. ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF.
9. ALL SOIL WASHED, DROPPED, SPILLED OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO THE PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY.
10. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.
11. AT THE TIME THAT SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
12. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS / ACRE, (OR 450 LBS / 1000 SF OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12" OF SETTLED SOIL WITH A PH OF 5 OR MORE, OR 24" WHERE TREES OR SHRUBS ARE TO BE PLANTED.
13. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
14. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH STANDARD FOR DEWATERING.
15. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL.
16. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN. STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE WILL REQUIRE CERTIFICATION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN. CERTIFICATION OF A NEW SOIL EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000 SQUARE FEET IS DISTURBED.
17. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE #6.
18. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORM WATER OUTFALLS OR OFF SITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

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SEEDING SCHEDULE

1. TEMPORARY SEEDING SHALL CONSIST OF EITHER:

COOL SEASON GRASSES	RATES	SEEDING DATES	DEPTHS
PERENIAL RYEGRASS	1.0 LBS./S.F.	3/1-5/15 OR 8/15-10/1	0.5 IN.
SPRING OATS	2.0 LBS./S.F.	3/1-5/15 OR 8/15-10/1	1.0 IN.
WINTER BARLEY	2.2 LBS./S.F.	8/15-10/1	1.0 IN.
ANNUAL RYEGRASS	1.0 LBS./ S.F.	3/15-6/1 OR 8/1-9/15	0.5 IN.
WINTER CEREAL RYE	2.8 LBS./S.F.	8/1-11/15	1.0 IN.
WARM SEASON GRASSES			
PEARL MILLET	0.5 LBS./S.F.	5/15-8/15	1.0 IN.
MILLET (GERMAN OR HUNGARIAN)	0.7 LBS./S.F.	5/15-8/15	1.0 IN.

2. SITE PREPARATION (PERMANENT)

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.

B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING .

C. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.

D. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

SITE PREPARATION (TEMPORARY)

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING, PG. 19-1.

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

3. SEEDBED PREPARATION (PERMANENT)

A. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSIONS OFFICES (HTTP://NJAES.RUTGERS.EDU/COUNTY/). FERTILIZER SHALL BE APPLIED AT A RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING.

B. WORK LIME AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICLE TO A DEPTH OF 4 INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

C. HIGH ACID PRODUCING SOILS. SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED REPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.

4. SEEDBED PREPARATION (TEMPORARY)

A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES.

B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.

C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA BE RETILLED IN ACCORDANCE WITH THE ABOVE.

D. SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, PG. 1-1.

5. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, LUMPS OR ANY OTHER UNSUITABLE MATERIAL.

6. PERMANENT GROUND COVER OF SODDING OR SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE OR APPROVED EQUAL:

SEEDING	RATES
TALL FESCUE	6.0 LBS./1,000 S.F.
KENTUCKY BLUEGRASS (BLEND)	0.5 LBS./1,000 S.F.
PERENIAL RYEGRASS (BLEND)	0.5 LBS./1,000 S.F.

OPTIMAL SEEDING DATES: 8/15-10/15
ACCEPTABLE SEEDING DATES: 3/1-4/30 AND 5/1-8/14

SEED TO A DEPTH OF 0.5 IN.

7. THE SEEDING SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER OR LIGHT DRAG.

8. TACKING SHALL BE PERFORMED AS PER THE CURRENT STANDARDS OF THE FREEHOLD SOIL CONSERVATION DISTRICT. ASPHALT TACKIFIERS ARE NOT ACCEPTABLE.

9. MULCHING

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

A. STRAW OR HAY. UNNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.

APPLICATION. SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.

ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRIS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
2. MULCH NETTINGS. STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
3. CRIMPER (MULCH ANCHORING TOOL). A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
4. LIQUID MULCH-BINDERS. -MAY BE USED TO ANCHOR HAY OR STRAW MULCH.

A. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.

B. USE ONE OF THE FOLLOWING:

(1) ORGANIC AND VEGETABLE BASED BINDERS -NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.

(2) SYNTHETIC BINDERS -HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

NOTE: ALL NAMES GIVE ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A COMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

STANDARD FOR STABILIZATION WITH MULCH ONLY

1. SITE PREPARATION

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING.

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11-42.

2. PROTECTIVE MATERIALS

A. UNROTEED SMALL-GRAIN STRAW AT 2.0 TO 2.5 TONS PER ACRE IS SPREAD UNIFORMLY AT 90-115 POUNDS PER 1,000 S.F. AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN. THE APPROVED RATED ABOVE HAVE BEEN MET WHEN THE MULCH COVERS THE GROUND COMPLETELY UPON VISUAL INSPECTION, I.E. THE SOIL CANNOT BE SEEN BELOW THE MULCH.

C. SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE USED UNDER SUITABLE CONDITIONS AND IN QUANTITIES AS RECOMMENDED BY THE MANUFACTURER.

D. WOOD-FIBER OR PAPER-FIBERMULCH AT THE RATE OF 1,500 POUNDS PER ACRE (OR ACCORDING TO THE MANUFACTURER'S REQUIREMENTS) MAY BE APPLIED BY A HYDROSEEDER.

E. MULCH NETTING, SUCH AS PAPER JUTE, EXCELSIOR, COTTON, OR PLASTIC, MAY BE USED.

F. WOODCHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED. WOODCHIPS WILL NOT BE USED ON AREAS WHERE FLOWING WATER COULD WASH THEM INTO AN INLET AND PLUG IT.

G. GRAVEL, CRUSHED STONE, OR SLAG AT THE RATE OF 9 CUBIC YARDS PER 1,000 S.F. APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 3 INCHES MAY BE USED. SIZE 2 OR 3 (ASTM C-33) IS RECOMMENDED.

3. MULCH ANCHORING

MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OR THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA AND STEEPNESS OF SLOPES.

A. PEG AND TWINE - DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2-3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISSCROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.

B. MULCH NETTINGS - STAPLE PAPER, COTTON, OR PLASTIC NETTINGS OVER MULCH. USE DEGRADABLE NETTING IN AREAS TO BE MOWED. NETTING IS USUALLY AVAILABLE IN ROLLS 4 FEET WIDE AND UP TO 300 FEET LONG.

C. CRIMPER MULCH ANCHORING COULTER TOOL - A TRACTOR DRAWN IMPLEMENT ESPECIALLY DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOLID SURFACE. THIS PRACTICE AFFORDS MAXIMUM EROSION CONTROL, BUT ITS USE IS LIMITED TO THOSE SLOPES UPON WHICH THE TRACTOR CAN OPERATE SAFELY. SOIL PENETRATION SHOULD BE ABOUT 3 TO 4 INCHES. ON SLOPING LAND, THE OPERATION SHOULD BE ON THE CONTOUR.

D. LIQUID MULCH-BINDERS

1. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. REMAINDER OF AREA SHOULD BE UNIFORM IN APPEARANCE.
2. USE ONE OF THE FOLLOWING:

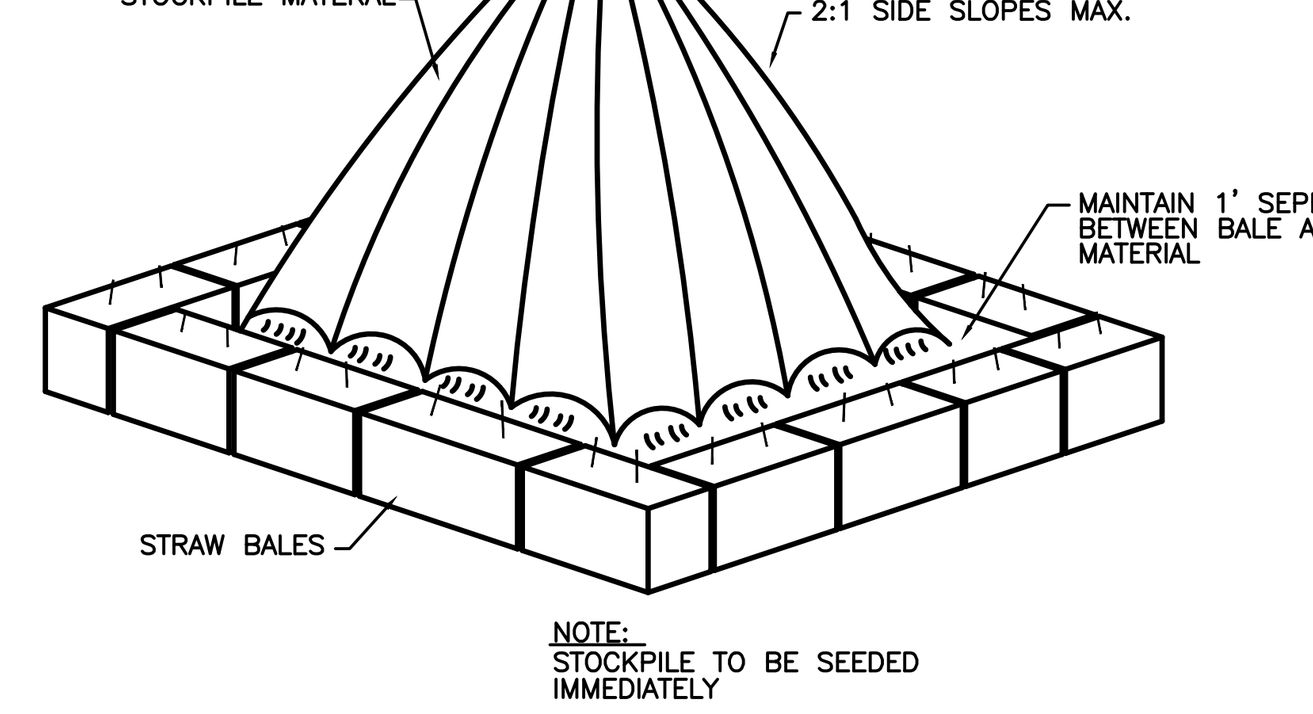
a. ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS THAT MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS. VEGETABLE BASED GELS SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER.

b. SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES AND WEATHER CONDITIONS RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

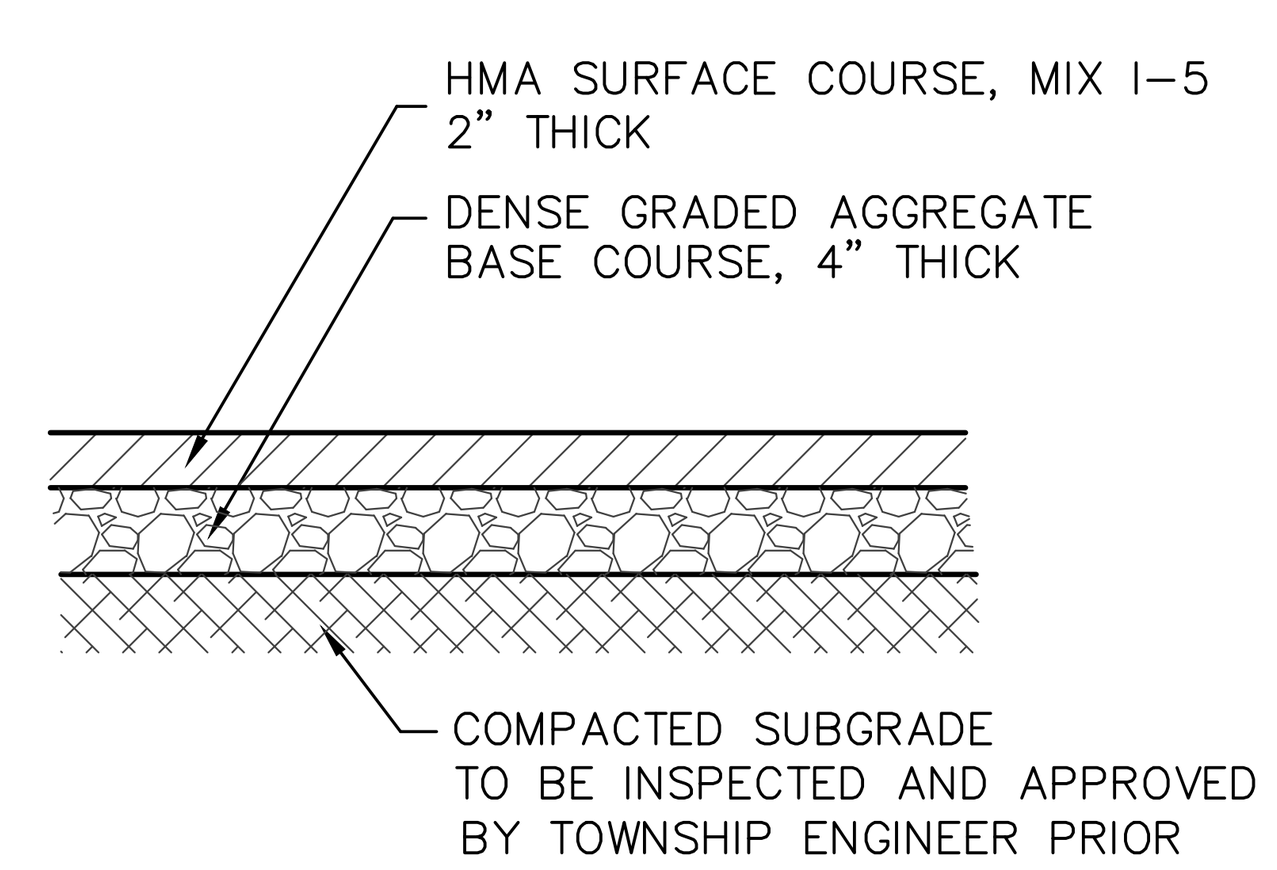
NOTE: MULCHING IS REQUIRED ON ALL SEEDING

CONSTRUCTION SCHEDULE AND PROCEDURE FOR IMPLEMENTATION OF SOIL EROSION AND SEDIMENT CONTROL MEASURES

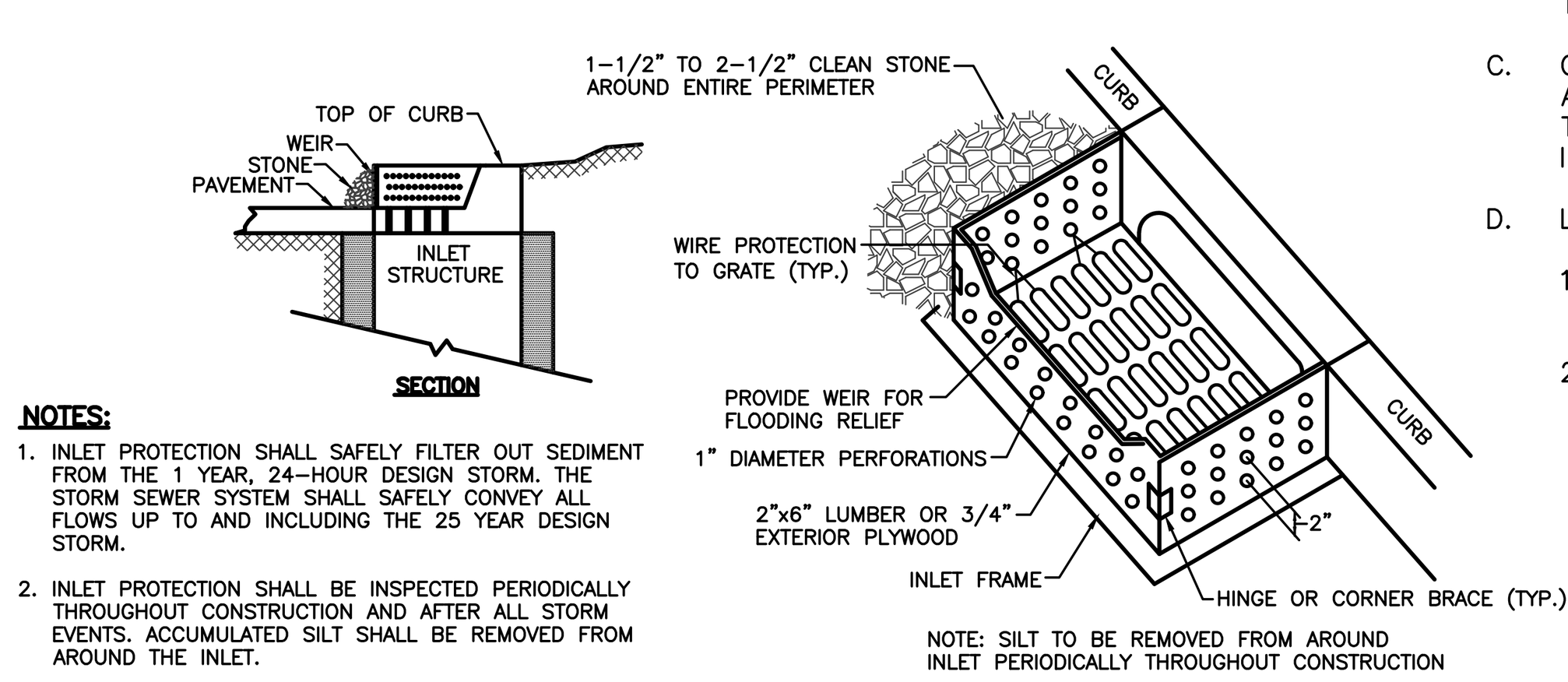
1. INSTALL SILT FENCE AND INLET PROTECTION.	1 DAY
2. PROVIDE TEMPORARY ACCESS PROTECTION (CONSTRUCTION ENTRANCE).	1 DAY
3. CLEAR ALLOWABLE VEGETATION.	2 DAYS
5. STRIP AND STOCKPILE TOPSOIL. APPLY TEMPORARY STABILIZATION.	2 DAYS
6. ESTABLISH ROUGH GRADES AS NECESSARY TO CONSTRUCT IMPROVEMENTS.	2 DAYS
7. CONSTRUCT IMPROVEMENTS.	3 MONTHS
8. CONSTRUCT FINE GRADING TO FINISHED GRADES, RE-SPREAD TOPSOIL AND ESTABLISH PERMANENT VEGETATIVE COVER ON THE LOT.	1 WEEK
9. REMOVE ACCESS PROTECTION, INLET PROTECTION, AND SILT FENCE AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED.	1 DAY



STOCKPILE CONTROL DETAIL
N.T.S.



TYPICAL BIT. DRIVEWAY SECTION
N.T.S.

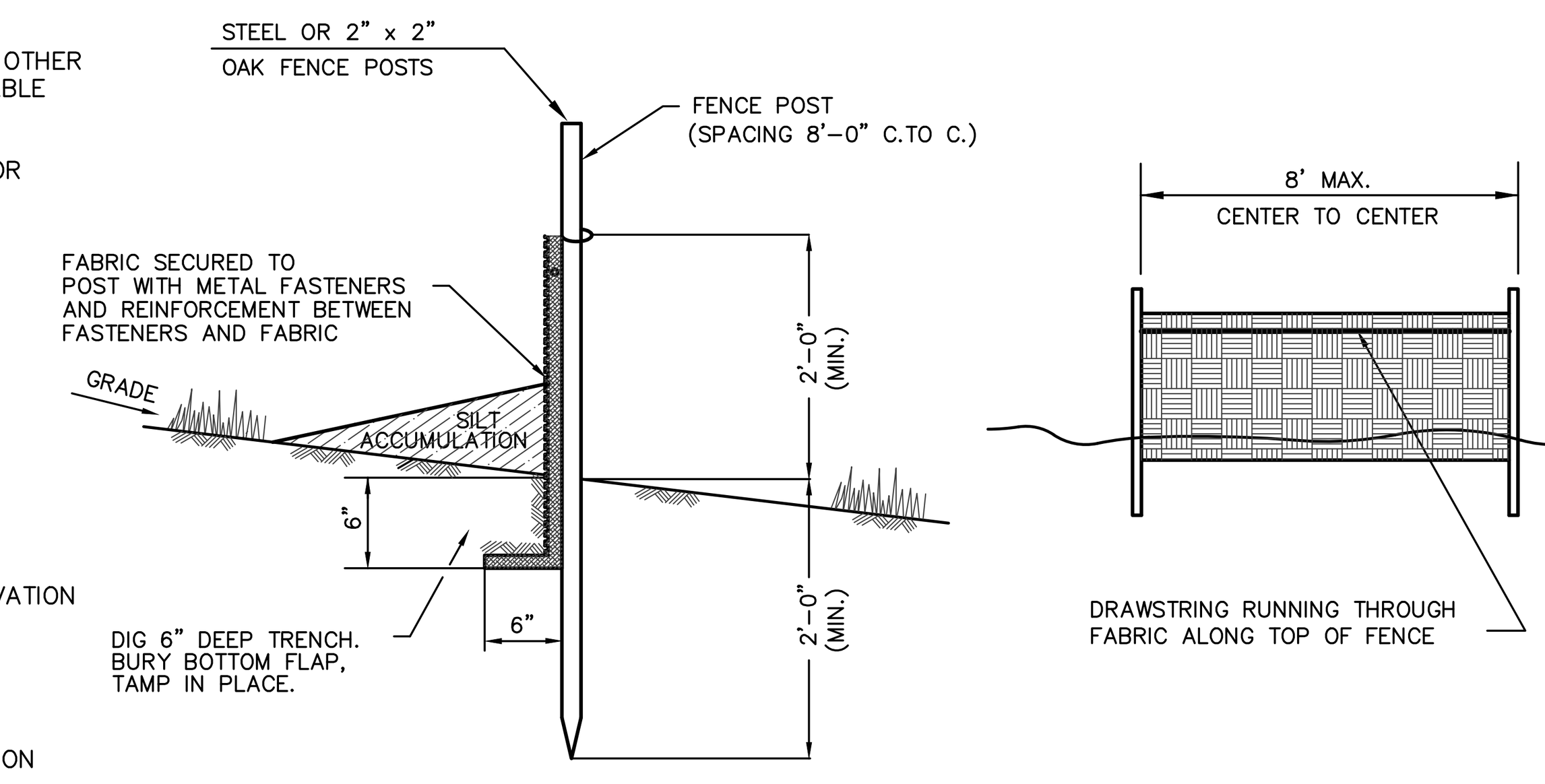


NOTES:

1. INLET PROTECTION SHALL SAFELY FILTER OUT SEDIMENT FROM THE 1 YEAR, 24-HOUR DESIGN STORM. THE STORM SEWER SYSTEM SHALL SAFELY CONVEY ALL FLOWS UP TO AND INCLUDING THE 25 YEAR DESIGN STORM.
2. INLET PROTECTION SHALL BE INSPECTED PERIODICALLY THROUGHOUT CONSTRUCTION AND AFTER ALL STORM EVENTS. ACCUMULATED SILT SHALL BE REMOVED FROM AROUND THE INLET.
3. FOR TYPE "A" AND "E" INLETS, PROVIDE SECOND WEIR PANEL ALONG FOURTH EDGE.

NOTE: SILT TO BE REMOVED FROM AROUND INLET PERIODICALLY THROUGHOUT CONSTRUCTION

INLET PROTECTION DETAIL
N.T.S.



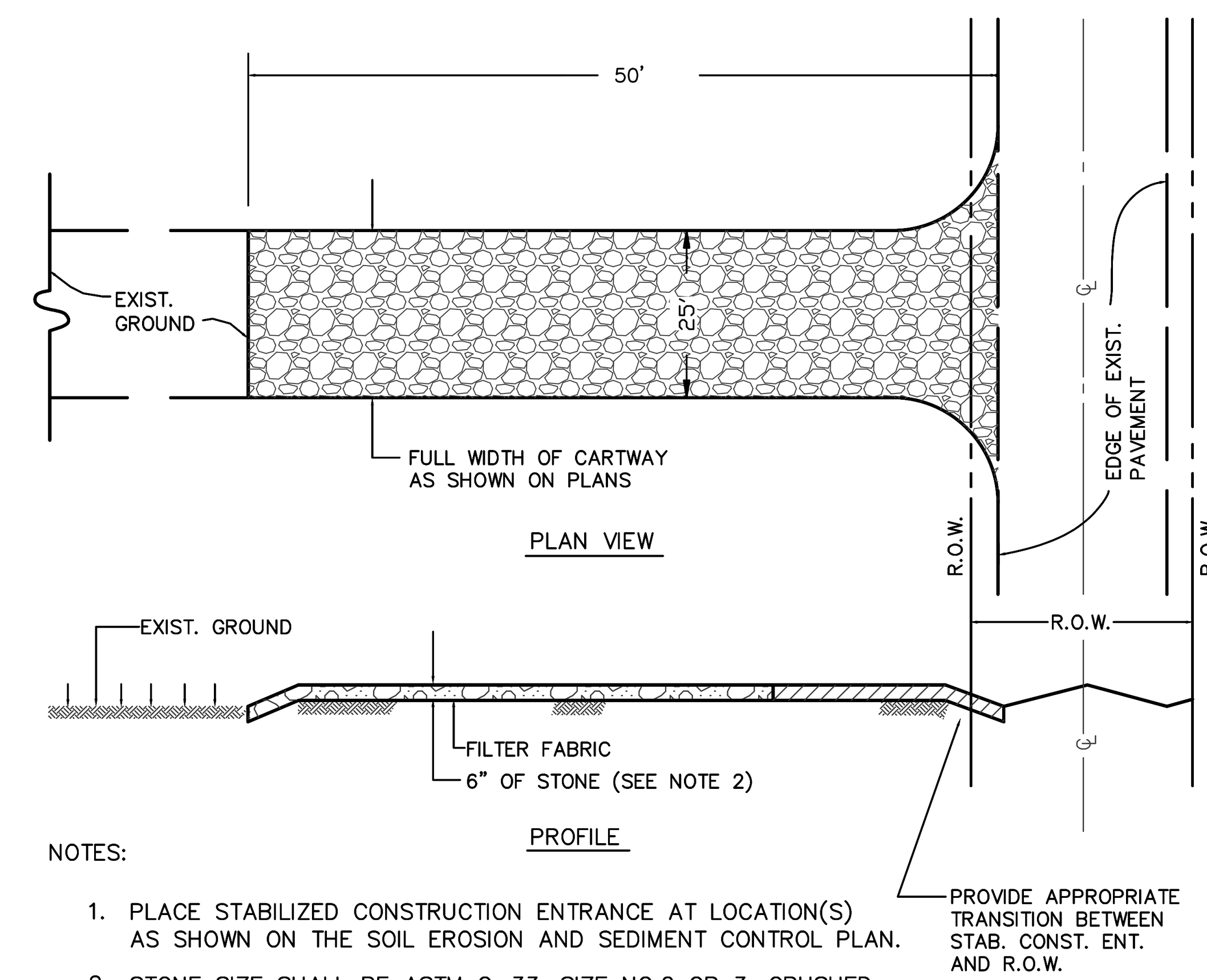
NOTE: SYNTHETIC FILTER FABRIC SHALL BE FIRMLY ATTACHED TO UPHILL SIDE OF FENCE POSTS. OPEN AREA SHALL BE GREATER THAN 4% BUT LESS THAN 10% MEETING U.S. ARMY CORPS. OF ENGINEERS SPECIFICATION NO. CW02215 FOR STRENGTH.

SILT FENCE DETAIL
N.T.S.

NOTE: SILT FENCE TO BE PLACED AT ALL DOWNSTREAM SLOPES TO BE DISTURBED.

MAINTENANCE NOTES:

1. SEDIMENT SHALL BE REMOVED FROM THE UPSTREAM FACE OF THE BARRIER WHEN IT HAS REACHED A DEPTH OF ½ THE BARRIER HEIGHT.
2. REPAIR OR REPLACE BARRIER (FABRIC, POSTS, BALES ETC.) WHEN DAMAGED.
3. BARRIERS SHALL BE INSPECTED DAILY FOR SIGNS OF DETERIORATION AND SEDIMENT REMOVAL.



NOTES:

1. PLACE STABILIZED CONSTRUCTION ENTRANCE AT LOCATION(S) AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
2. STONE SIZE SHALL BE ASTM C-33, SIZE NO.2 OR 3, CRUSHED STONE.
3. THE THICKNESS OF THE STAB. CONST. ENT. SHALL NOT BE LESS THAN 6".
4. THE WIDTH AT THE EXIST. PAVEMENT SHALL NOT BE LESS THAN THE FULL WIDTH OF POINTS OF INGRESS AND EGRESS.
5. THE STAB. CONST. ENT. SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE R.O.W./PAVEMENT. THIS REQUIRES PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED TO TRAP SEDIMENT.
6. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO THE PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE

REV.	DATE	DESCRIPTION
4	10-06-26	GENERAL REVISIONS
3	08-12-26	GENERAL REVISIONS
2	12-9-25	GENERAL REVISIONS
1	11-1-25	GENERAL REVISIONS.

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Fax: 732.866.4348

PROJECT NO.: 23112
DATE: AUGUST 11, 2025
DRAWING NO.: 23112PP
DRAWN BY: AJG
CLIENT: CINA
SCALE: AS SHOWN

NJDEP PERMIT PLAN
BUILDING PERMIT
PLOT PLAN
SOIL EROSION AND SEDIMENT CONTROL PLAN
16 HARBOR DRIVE
FOR
BLOCK 111
LOT 22
BOROUGH OF RUMSON
MONMOUTH COUNTY
NEW JERSEY

A.J. GARITO, JR.
10-06-2026
DATE
N.J. Professional Engineer
License No. 24GE03799700

SHEET NO. 4 OF 5

STANDARD
FOR
MANAGEMENT OF HIGH ACID-PRODUCING SOILS

Definition

High acid-producing soils are soils with a pH of 4.0 or less or contain iron sulfide.

Purpose

To prevent or limit exposure area, time, and spreading by equipment or rainfall on- and off-site and to minimize erosion, sedimentation and acid leachate-related damages. High acid-producing soil may be exposed during excavation and land grading activities, or may be introduced in dredged sediment. Soils and sediment containing iron sulfide, characterized by pyrite or marcasite nuggets or greensands, are chemically oxidized when exposed to air, producing sulfuric acid and result in soil pH levels falling to pH 4.0 and lower. Most vegetation is incapable of growth at this pH level. Adjacent land and receiving waters will be negatively impacted by the acid leachate. Calcium-containing materials such as sidewalks, culverts and other structures and some metallic materials are also susceptible to degradation. Agricultural limestone materials applied at rates of 8 tons per acre have resulted in only a temporary buffering effect, and "liming-only" is therefore not considered an acceptable mitigation practice.

Water Quality Enhancement

Protects onsite soils and offsite streams and lakes from sulfuric acid leachate that creates soil pH conditions unsuitable for growth of vegetation.

Where Applicable

This practice is applicable to any high acid-producing soil materials. Such materials have been found in the Coastal Plain areas of Burlington, Camden, Cumberland, Gloucester, Mercer, Middlesex, Monmouth, Ocean, Salem and Somerset Counties.

Planning Criteria

Early recognition and burial, removal or disposal of high acid-producing soils is essential for limiting the amount of acidic material produced.
Review a surface geology map for the proposed site to investigate the presence of geologic formations which commonly contain high acid-producing deposits. The geologic formations are as follows:

Cheesequake	Manasquan	Red Bank, Sandy Hook Member
Englishtown Sand	Marshalltown	Shark River
Hornerstown	Merchantville	Tinton
Kirkwood	Navesink	Wenonah
Magothy	Raritan	Woodbury Clay

Figure 1-1 shows areas where these deposits may be present.

Contact the local Soil Conservation District to determine the historical presence of high acid-producing soils in the vicinity of the proposed development site.

High acid-producing soils may be present in undisturbed soils at varying depths, including near the soil surface to excavations or deep disturbances. Its presence on a site may be significant or limited in the soil profile. High acid-

producing soils are commonly black, dark brown, gray or greenish with silvery pyrite or marcasite nuggets or flakes. Alternatively, sandy soils or reddish, yellowish or light to medium brown soil materials are usually free of high acid-producing deposits.

Methods and Materials

1. Limit the excavation area and exposure time when high acid-producing soils are encountered.

2. Topsoil stripped from the site shall be stored separately from temporarily stockpiled high acid-producing soils.

3. Stockpiles of high acid-producing soil should be located on level land to minimize its movement, especially when this material has a high clay content.

4. Temporarily stockpiled high acid-producing soil material to be stored more than 48 hours should be covered with properly anchored, heavy grade sheets of polyethylene where possible. If not possible, stockpiles shall be covered with a minimum of 3 to 6 inches of wood chips to minimize erosion of the stockpile. Silt fence shall be installed at the toe of the slope to contain movement of the stockpiled material. Topsoil shall not be applied to the stockpiles to prevent topsoil contamination with high acid-producing soil.

5. High acid-producing soils with a pH of 4.0 or less or containing iron sulfide (including borrow from cuts or dredged sediment) shall be ultimately placed or buried with limestone applied at the rate of 10 tons per acre (or 450 pounds per 1,000 square feet of surface area) and covered with a minimum of 12 inches of settled soil with a pH of 5.0 or more except as follows:
   a. Areas where trees or shrubs are to be planted shall be covered with a minimum of 24 inches of soil with a pH or 5 or more.
   b. Disposal areas shall not be located within 24 inches of any surface of a slope or bank, such as berms, stream banks, ditches, and others, to prevent potential lateral leaching damages.

6. Equipment used for movement of high acid-producing soils should be cleaned at the end of each day to prevent spreading of high acid-producing soil materials to other parts of the site, into streams or stormwater conveyances, and to protect machinery from accelerated rusting.

7. Non-vegetative erosion control practices (stone tracking pads, strategically placed limestone check dam, sediment barrier, wood chips) should be installed to limit the movement of high acid-producing soils from, around, or off the site.

8. Following burial or removal of high acid-producing soil, topsoiling and seeding of the site (see Temporary Vegetative Cover for Soil Stabilization, Permanent Vegetative Cover for Soil Stabilization, and Topsoiling), **monitoring must continue for a minimum of 6 months** to ensure there is adequate stabilization and that no high acid-producing soil problems emerge. If problems still exist, the affected area must be treated as indicated above to correct the problem.

STANDARD
FOR
DUST CONTROL

Definition

The control of dust on construction sites and roads.

Purpose

To prevent blowing and movement of dust from exposed soil surfaces, reduced on-site and off-site damage and health hazards and improve traffic safety.

Condition Where Practice Applies

This practice is applicable to areas subject to dust blowing and movement where on-site and off-site damage is likely without treatment. Consult with local municipal ordinances on any restrictions.

Water Quality Enhancement

Sediments deposited as "dust" are often fine colloidal material which is extremely difficult to remove from water once it becomes suspended. Use of this standard will help to control the generation of dust from construction sites and subsequent blowing and deposition into local surface water resources.

Planning Criteria

The following methods should be considered for controlling dust:

Mulches - See Standard of Stabilization with Mulches Only, pg. 5-1

Vegetative Cover - See Standard for: Temporary Vegetative Cover, pg. 7-1, Permanent Vegetative Cover for Soil Stabilization pg. 4-1 and Permanent Stabilization with Sod, pg. 6-1

Spray-On Adhesives - On mineral soils (not effective on muck soils). Keep traffic off these areas.

Table 16-1 Dust Control Materials

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
Anionic asphalt emulsion	7:1	Coarse Spray	1200
Latex emulsion	12.5:1	Fine Spray	235
Resin in water	4:1	Fine Spray	300
Polyacrylamide (PAM) - spray on Polyacrylamide (PAM) - dry spread	Apply according to manufacturer's instructions. May also be used as an additive to sediment basins to flocculate and precipitate suspended colloids. See Sediment Basin standard, p. 26-1		
Acidulated Soy Bean Soap Stick	None	Coarse Spray	1200

Tillage - To roughen surface and bring clods to the surface. This is a temporary emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart and spring-toothed harrows are examples of equipment which may produce the desired effect.

Sprinkling - Site is sprinkled until the surface is wet.

Barriers - Solid board fences, snow fences, burlap fences, crate walls, bales of hay and similar material can be used to control air currents and soil blowing.

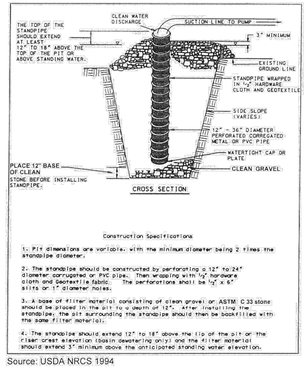
Calcium Chloride - Shall be in the form of loose, dry granules or flakes fine enough to feed through commonly used spreaders at a rate that will keep surface moist but not cause pollution or plant damage. If used on steeper slopes, then use other practices to prevent washing into streams or accumulation around plants.

Stone - Cover surface with crushed stone or coarse gravel.

2. Sump Pits are temporary pits which are used to remove excess water while minimizing sedimentation. The number of sump pits and their locations shall be included on the plans. Pits may be relocated to optimize use but discharge location changes must be coordinated with the local conservation district. The design must conform to the general criteria outlined on detail 14-2.

A perforated vertical standpipe is wrapped with 2" hardware cloth and geotextile fabric then placed in the center of an excavated pit which is then backfilled with filter material consisting of anything from clean gravel (minimal fines) to AST M C 33 stone (1 2" maximum diameter). Water is then pumped from the center of the standpipe to a suitable discharge area such as into a sediment basin or suitable filter.

Detail 14-2: Sump Pit



Source: USDA NRCS 1994

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REV.	DATE	DESCRIPTION
4	10-06-26	GENERAL REVISIONS
3	08-12-26	GENERAL REVISIONS
2	12-9-25	GENERAL REVISIONS
1	11-1-25	GENERAL REVISIONS.

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PROJECT NO.: 23112
DATE: AUGUST 11, 2025
DRAWING NO.: 23112PP
DRAWN BY: AJG
CLIENT: CINA
SCALE: AS SHOWN

NJDEP PERMIT PLAN
BUILDING PERMIT
PLOT PLAN
SOIL EROSION AND SEDIMENT CONTROL PLAN
16 HARBOR DRIVE
FOR
BLOCK 111
LOT 22
BOROUGH OF RUMSON
MONMOUTH COUNTY
NEW JERSEY

A.J. GARITO, JR.
10-06-2026
DATE
N.J. Professional Engineer
License No. 24GE03799700

SHEET NO. 5 OF 5